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February-March, 1980
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The National
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February-March, 1980
Volume 28 Number 3
(ISSN 0027-9315)

A Word With The Editor

If you don't have the dates of February 16-23 marked on your calendar, put a big circle around them right now and read on. Why? Because that is the time of FFA WEEK, that nationwide celebration when FFA members and their adult leaders throughout the nation put forth extra effort to tell their community about vocational agriculture/FFA.

The theme this year is "FFA—Preparing For Progress." The How-To-Do-It and Idea Packet mailed your chapter recently is full of things your chapter can do to have a successful celebration. As explained in the information packet, the success of FFA WEEK depends on careful planning. Start early. Make detailed arrangements for FFA WEEK activities. Have a plan. Divide the responsibilities among several committees. You will have more enthusiasm when all members are involved.

No other country has an instructional program in high school agriculture like we do. And no other country's agriculture is as productive as that of the United States. Vo-ag/FFA has been a part of that success story.

Someone once said that freedom must be won anew by each generation. Likewise, we must continue to remind our fellow Americans that this country still needs an instructional program in vocational agriculture at the high school level if we are to continue to be a land of plenty. FFA WEEK is a good time to do just that.

FFA WEEK is also a good time to complete your chapter's membership drive for the year if you have students in agriculture that are not in FFA. If they are not members, they are missing some of the educational benefits they are entitled to receive. As the decade of the '70s ends, and the '80s begin, FFA is experiencing a decline in membership nationwide even though some states are showing more members than ever before. Let's reverse the membership trend and make the '80s the greatest decade ever for FFA.

Wilson Carnes

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The Cover

Steve Althouse calls himself a "dryland farmer," a term applied to many crop growers in Steve's home state of Nebraska. On the cover, Steve mans the controls of an irrigation system that douses fields with water and fertilizer. *Cover photo by Jeffrey Tennant*

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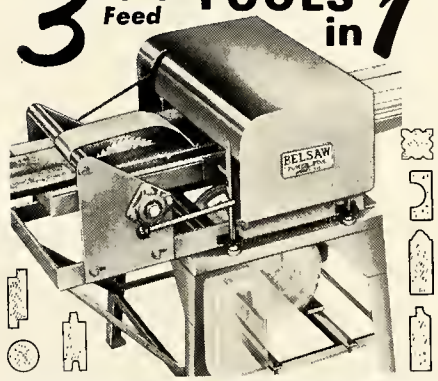

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The FFA NEWS IN BRIEF

PHILLIP MORRIS, INC., recently presented a $27,000 check to FFA for a special display room in the proposed Hall of Achievement. Dr. Barbra Reuter, in presenting the check to national FFA officers, said, "We present this to you, because like many FFA members, you are living proof of the program's (FFA) benefits." Phillip Morris joins the corporations of Pioneer Hi-Bred International, DeKalb AgResearch, Pfizer—Agricultural Division, John Deere and Seald-Sweet Growers as special display sponsors of the Hall.

A TOUR OF AMERICA and Japan by the National FFA Officers will begin this month. The purpose of the tour will be to inform persons in agriculture, business, industry and government of the aims, purposes and activities of vo-ag/FFA. The tour will take officers to such cities as Washington, D.C., Memphis, Atlanta, Los Angeles, San Francisco, Seattle, New York and Tokyo. For the second time, the Mitsui Corporation of Japan will sponsor the officers' international experience.

ROLAND HENDRICKSON, president of the agricultural division of Pfizer, Inc. will serve FFA as 1980 chairman of the Foundation Sponsoring Committee. Hendrickson, who succeeds Chevrolet General Manager Robert Lund, will front the effort to provide funds for programs, incentive awards, contests and leadership training for FFA members.

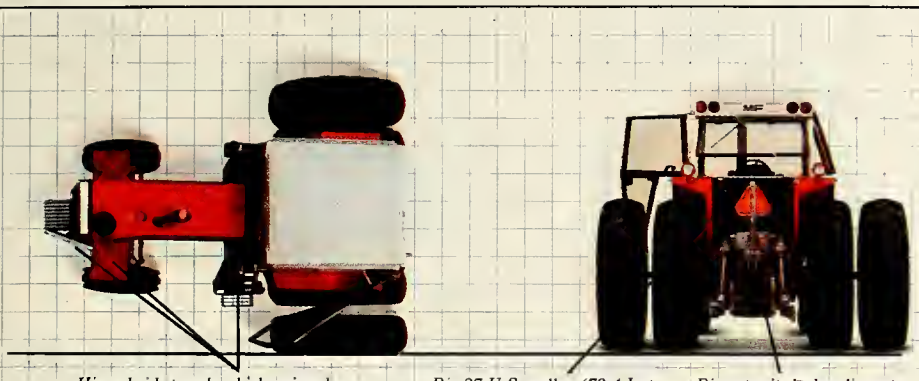
ONE HUNDRED PERCENT membership in FFA among vocational agriculture students is the case in two states, based on 1978-79 school year statistics. North Dakota reported 101 percent enrollment with Missouri in at 100.5 percent. States reporting above 100 percent often have active FFA members, for instance, who are graduated. Nebraska boasts a 98 percent membership in FFA among the state's vo-ag students, Oklahoma reports 96.2. Other states above 90 percent membership are Ohio, Texas, Alabama, Connecticut, Colorado and Kansas.

FLOYD DOERING, state supervisor of agricultural education in Wisconsin, has succeeded Odell Miller as national FFA Alumni president. Howard Bradley, Gus Douglass and James Guilinger were also recently recognized by FFA Alumni as recipients of the organization's Outstanding Achievement Award. 1979's national Outstanding Affiliate award went to the New Lexington, Ohio, Alumni with the East Butler, Nebraska, affiliate placing second.

REGIONAL WINNERS in The President's Challenge energy program will be on hand in Washington, D.C., when President Carter reveals and rewards the national winner. The four top FFA chapters in the program—selected by a committee of FFA, government and industry officials—will each receive a $400 grant, plaque and a partial travel stipend sponsored by the Estech General Chemical Corporation of Chicago.

Your six national officers present Bernie Staller, National FFA Foundation executive director, with their one-dollar contribution to the FFA Hall of Achievement campaign. Some 17,000 FFA members have each given one dollor to the Hall fund. Officers, from left, are: Dee James, Don Trimmer, Elin Duckworth, Jeff Kirby, Doug Rinker and Phil Benson. All members are encouraged to join the campaign.

A PERKINS UP FRONT, COMFORT ON TOP, AND A GOOD NAME BEHIND IT.



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Readers Report

MAILBAG

Bonn, West Germany

Now that I have safely returned from Kansas City to the Federal Republic of Germany, it is my duty and honor to convey to the Board of the Future Farmers of America, my heartfelt thanks for the high honor conferred upon me at the National Convention.

I express my deepest thanks not only to the leadership of FFA, but to the entire FFA organization for the Honorary American Farmer degree. I see this honor as a new responsibility, for me and my organization, to strengthen the cooperation between us.

E. Schreiber
Secretary General
German Rural Youth Organization

Ozark, Missouri

We would like to publish in its entirety your article in the December-January issue titled "Once a Member, An Alumni for Life," about Tom Stine.

If convenient, could you lend us the original of the photo with President Eisenhower? We promise to return it in good condition.

Joe Cody
"Ozark Headliner"

Lancaster, Virginia

Please send to my department 15 copies of the 1979 June-July issue of the magazine.

The family members of the Hudnall and Hudson boys would like to have copies of the magazine that contains the articles on these boys. Also as advisor I would like to use some of these magazines for the promotion of FFA in our area.

Ernest W. Palin,
Advisor

Westerkappeln, West Germany

Now when I say, "I've gone a long way in the FFA," I mean it. Several thousand miles in fact, from the dry cold of Wyoming to the wet rainy cold of West Germany.

The September WEA group had a safe trip to Europe, regardless of the two-hour delay in New York for engine repairs on our DC-10.

I personally have done everything on the dairy farm I live on, from sweeping the brick cobblestones with a homemade stick broom to hauling corn for silage with a new four-wheel drive Massey Ferguson tractor (with cab and radio!). I've learned so much about a different way of life, about people and about myself. Perhaps most of all, I've developed a much greater appreciation for good ol' United States of America.

I challenge anyone with a desire to travel and learn about people to go on WEA. It's an experience that will last a lifetime.

Al Snyder
1979 WEA Class President

Amelia, Virginia

I was reading an article in your November magazine about President Carter's challenging the FFA to help fight the war on the energy crisis. I would like to say our country is really getting into a big mess by wasting energy.

All of the people of the U.S. have got to get serious on energy control. As a member of the Amelia Chapter of the FFA, I'm joining the challenge across the nation to help the people of the U.S. be more aware and more concerned about our future.

Horace E. Booker

Smithville, Ohio

I was recently reading the December-January issue of your magazine and much to my surprise, found that I was in one of the pictures in this issue. In your article entitled "Once a Member, An Alumni for Life," on page 16, I am the FFA member directly to the right of President Eisenhower. I was state treasurer from Ohio and was part of the Ohio delegation to the National State Officers Seminar.

If possible, I would like to have a copy of that photograph and any other photographs that you might have of that conference.

One last note, I believe that the date that this picture was taken was in June of 1959 instead of January. This conference was held at the same time that the dedication for the National FFA Center was conducted in June of 1959.

Bernard Nirode
Agriculture Supervisor
Wayne County Joint Vocational School

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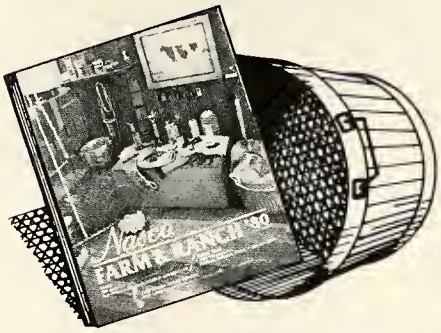

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Agriculture

LOOKING AHEAD

MIGHTY MITES? The United Nations' Food and Agricultural Organization says 364 species of mites and insects have developed resistance to pesticides. Among the crops they threaten are rice and cotton—two of the world's principal food and money crops. To lessen the problem, some scientists argue for the abandonment of total reliance on chemical pesticides in favor of integrated pest management (IPM). IPM strives for maximum use of natural controls over pest populations, enhancing natural elements such as predators with techniques such as soil tillage and crop rotations.

IRAN looks to the United States for much of its food supply. According to USDA, the Islamic nation imported nearly $2 billion worth of food over the last year. U.S. food products comprise about one-fourth of the total, providing Iran with 80 percent of its wheat, 25 percent of its feed grain and 70 percent of its vegetable oil and rice. Iranian imports of soybean oil cake and meat are purchased solely from the United States.

SUPER SLURPER, a material that can absorb 5,300 times its weight of pure water, is finding some uses in agriculture. Introduced by the USDA, the absorbant is a water-jelling combination of manmade compound chemically grafted to cereal grain starch. Tests show that coating seeds with the substance increases water holding power in plants. When slurper is used as a seed covering, other materials may be added to the compound to form protection against insects and diseases.

EATING OUT continued to be a popular method of satisfying the appetite in 1979. According to the U.S. Department of Agriculture (USDA), Americans consumed over $250 billion worth of food during the year, or about $1,144 per person. Each person spent an estimated $400 on food eaten outside the home. That's about one of every three dollars spent for food. An expected growth in away-from-home eating in 1980 and beyond will have an impact on the demand for various farm products, such as beef for hamburger, and the way products are processed and marketed.

BUTTERFAT CONTENT in cow's milk can be easily raised or lowered by manipulating the amount of saliva produced when the cow chews. Farmers who want increased butterfat content from their herd can lengthen chewing times by adding long (unchopped) hay to the diet. "The higher the roughage, or fiber content, of a cow's feed the more she chews," says Melvin Anderson, an animal scientist with the Science and Education Administration. Anderson's study also shows that a point is reached when butterfat content cannot be increased regardless of chewing time.

OUTSTANDING TEENS listed in the 1979-80 edition of *Who's Who Among American High School Students* possess similar personal characteristics to students selected in 1970. Teens have changed over the last decade, but a recent survey shows they still maintain traditional moral values. One major difference is an increased awareness to problems of inflation and energy. According to the survey, 85 percent of the students prefer a traditional marriage, 99 percent disapprove of hard drugs, 92 percent have never tried marijuana, 63 percent favor nuclear energy as a power source and seven out of ten have a career goal in mind.

RESTAURANT trade consumes more than 25 percent of the total U.S. beef production, reports the Beef Industry Council. The statistic shows the growing food-service business as a vital cattle industry market. For instance, this year Americans will eat 46 billion meals and snacks away from home. For most of them, beef will be the number one menu choice. According to USDA reports, red meat production is up and meat imports, especially veal, are also on the rise.

ADDING FAT to swine rations to improve performance is not a new idea. But according to Gilbert Hollis, University of Illinois extension swine specialist, the concept is attracting commercial interest and holds promise for producers. Hollis says recent research has focused on adding fat to gestation and lactation diets as well as market hog rations. Initial results show fat can increase baby pig survival in some instances, while market hogs consistently record improved feed conversion ratios on the added-fat ration.

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The end of a decade came at year's end, 1979. But with the end came a beginning—a new horizon, with the rising sun heading straight into the 1980's. 1980 will hold special challenges for FFA, America and the world's agricultural community.

Future Farmers look forward to the setting of the sun on accomplished goals. For with the dusk comes a promise of a new day. The sun has set on 1979, but the year past will be remembered in many ways by all of us involved in the FFA.

So, too, will the year be remembered for history's sake. The following ten events, selected by editors of *The National FUTURE FARMER*, stand as highlights of an unforgettable year—highlights that have touched the people who are the FFA.

1979

A Year of Main Events

1. National FFA Officers tour Japan. February provided the first of the year's highlights as the 1978-79 national officers became the first team to tour a foreign country on behalf of FFA. The officers, accompanied by *The National FUTURE FARMER* Editor Wilson Carnes and national Executive Secretary Coleman Harris, visited Japan as part of the annual goodwill tour. Sponsored by Mitsui & Company, Ltd., officers Mark Sanborn, Kelly Grant, Elvin Caraway, Kevin Drane, Dean Norton and Jeff Rudd toured Japanese farms and agribusinesses, visited with government officials and met with Future Farmers of Japan.

2. FFA Alumni internship established. Approved by the FFA Board of Directors in January and the National FFA Alumni Council in February, the Alumni legislative internship began in June, 1979. Howard Morrison, a past national officer, completed the ten-week, one-term-only appointment in August. The overall purpose of the internship is to provide additional visibility to individuals and agencies in Washington, D.C., with influence on the status of vocational agriculture.

3. National Proficiency Award Seminar. A 15-day tour of Luxembourg, France, England, Holland and Belgium became an additional reward for the national winners of FFA's 22 proficiency awards. Sponsored through the National FFA Foundation, the 22 FFA members visited farms, experiment stations, agricultural industries and the world's largest agriculture show. The seminar is designed to provide award winners with an international experience in each proficiency area. National FFA staff members Jack Pitzer and Bob Seefeldt accompanied the winners on the first-ever annual seminar.

4. New National Advisor appointed. Byron Rawls assumed the duties of FFA national advisor on May 21, 1979, following the retirement of H. Neville Hunsicker. Hunsicker retired from the post after serving since 1965. Rawls, as Hunsicker's successor in the lead job in U.S. agricultural education, became only the sixth man to serve as FFA's chief executive officer.

5. The President's Challenge. President Jimmy Carter issued a unique challenge to FFA during the State FFA Presidents' Conference in Washington, D.C. On July 19, Carter urged FFA to "join in the battle for energy security." The White House reported that the chapter contributing the most to energy conservation and efficiency would receive special presidential recognition in the summer of 1980. Within days after Carter's challenge, a nationwide energy program was launched, with hundreds of FFA chapters participating in a competitive program of "energy action" activities.

6. NVATA leases FFA-owned property. The National Vocational Agriculture Teachers' Association dedicated its new office facilities, owned by FFA, on July 22. Sam Stenzel, NVATA executive director, signed a long-term lease from FFA for the property. NVATA is a support organization for many of the nation's FFA chapter advisors. The move created opportunities for increased FFA relations with the teachers' association.

7. One million dollars raised for FFA. Under the leadership of Robert D. Lund, vice president of General Motors Corporation, the National FFA Foundation raised $1,050,000 for funding of FFA programs and awards. Lund, as 1979 chairman of the Foundation Sponsoring Committee, set the million dollar goal —a goal that had never been reached. The total figure, far surpassing one million, was officially announced at the 1979 National FFA Convention.

8. New national contests initiated. The FFA launched national competition in extemporaneous public speaking and floriculture in 1979, bringing the total number of national judging and speaking contests to 11. Christe Peterson of Madison, Wisconsin, won the first national honors in the "extemp" event following the contest's final event before a National FFA Convention session. The floriculture team from Winona, Minnesota, walked away as national winners of the first-ever national floriculture finals.

9. Panama Future Farmers developed. The first direct grant to improve and expand a foreign Future Farmers organization was awarded FFA in early 1979. Through the grant from the U.S. Agency for International Development, FFA cooperated with Panama to complete a Future Farmer manual and train an executive secretary for the organization. The improvement of the Futuros Agricultures de Panama serves as a model for development of Future Farmer programs in other foreign nations.

10. USDA awards grant to FFA. On December 6, the U.S. Department of Agriculture granted $89,790 to the FFA for use in community development. The Farmers Home Administration grant, the first of its kind, will help in community development training for vo-ag teachers. The monies are also earmarked to develop and introduce a model college level community development curriculum for teacher educators in vocational agriculture. The FFA will implement and manage all programs.

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Grace and Marvin Myers

In Memoriam

Marvin D. Myers, director of the National FFA Chorus for the past 12 years, died at the age of 77 on January 2, 1980, in Lafayette, Indiana. He leaves his wife, Grace, a son, Fred, daughter Marilyn and over 1,300 FFA members whose lives Myers touched during his years of work with the FFA chorus.

Myers was born February 11, 1902, in Ohio and raised in that state. After graduating from Purdue University in Lafayette, Myers returned to join the Purdue staff in 1948. As assistant to the director of Purdue Musical Organizations, he directed Rural Youth, 4-H, FFA and Home Makers choral groups. In 1954, the youth-minded director organized the Indiana FFA Chorus. Then, in 1968, Myers began working with the national chorus.

Through years of dedicated service, Myers developed the National FFA Chorus into a respected unit of musicians and vocalists chosen solely from the ranks of FFA membership. Myers, a recipient of both the Honorary American Farmer degree and the FFA V.I.P. Citation, officially retired at the 1979 National FFA Convention.

Write for Prizes

FFA members enrolled in, or who have completed a state-sponsored hunter safety instruction program, can win $2,000 in U.S. Savings Bonds and merchandise prizes in the 1980 Marlin Hunter Safety Essay Contest.

Each state which participates in the contest, now open until the May 1, 1980, deadline, will have a junior and a senior winner.

The topic for this year's essay contest is "Why Should Americans Preserve the Sport of Hunting?" Entry forms are available from hunter safety instructors or by writing to: Marlin Essay Contest, Department 82, 100 Kenna Drive, North Haven, Connecticut 06473.

Farmers in the White House

By Erma Clevenger

AGRICULTURE produces leaders—23 of our 39 Presidents came from farms or farm related families.

The farm influence was greater during the early days of our country when most Americans were on farms, but rural America is still giving us Presidents.

Jimmy Carter, our 39th President, is the sixth generation of his family to have managed their Georgia farm.

The first President, George Washington, listed a planter first among his occupations of licensed surveyor, soldier, statesman and mule breeder. Agricultural research originated at Mount Vernon where Washington compiled crop reports and recorded the research on different wheat varieties. Land poor (his estate at one time totaled 33,000 acres), he borrowed money to attend his first presidential inauguration in April, 1789.

John Adams' father was a yeoman farmer from England. John Quincy Adams, son of John Adams, became our sixth President.

Thomas Jefferson, inventor and planter as well as a lawyer, architect and writer, became a landowner at 14 when his father died. A side-hill plow and an early version of the moldboard to turn the sod were inventions of Jefferson, and he was constantly improving other farm implements. Crop rotation was practiced on the early Jefferson farm and later at Monticello.

James Madison inherited a large portion of his father's farm, calling it Montpelier. Madison represented the interests of the farmers in the Continental Congress and as Secretary of State before winning the presidency in 1808.

Our fifth President, James Monroe, was the oldest child of a Virginia farmer. Monroe was instrumental in negotiating for the middle section of the United States by the Louisiana Purchase under the Jefferson administration. His second term as President was concluded in March, 1825, and Monroe retired to his farm in Loudoun County, Virginia.

Andrew Jackson was born in a log cabin on his father's South Carolina farm. Later, Jackson established a plantation in Tennessee—The Hermitage.

Abraham Van Buren, father of our eighth President, Martin Van Buren, was a truck farmer and innkeeper in Kinderhook, New York.

William Henry Harrison was born on a Virginia plantation. He ended his military career with the army in 1798 and settled on a land grant in North Bend, Ohio, from where he pursued his political interest.

James Knox Polk was the oldest child of a North Carolina farmer, later moving to a farm in Tennessee.

Orange County, Virginia, was the birthplace of Zachary Taylor and where he gained practical experience on his father's farm that he later used on his own Mississippi River plantation. When Zachary Taylor became President in 1849, his family, including his horse Whitey, moved to the White House where Whitey was pastured on the lawn. Whitey had served with Taylor on his military campaigns in the Mexican War and followed his master's last ride after Taylor died in July, 1850.

Millard Fillmore was born of hard-working New England farmers in Cayuga County, New York, and received his education in rural schools.

Franklin Pierce's father was a farmer, soldier and twice governor of New Hampshire.

Wheatland, near Lancaster, Pennsylvania, is what James Buchanan named his estate and where he retired from the presidency.

Abraham Lincoln was born on a Kentucky farm. He supported the Agricultural Reform Act which yielded the Homestead Act of 1861, under which land was opened up in the western United States and a quarter-billion acres was distributed.

Ulysses Simpson Grant preferred working on his father's farm in Ohio to working in the tannery.

James A. Garfield was the son of an Orange, Ohio, farmer and worked the farm after his father's death to support his mother.

Benjamin Harrison grew up on a 600-acre farm in North Bend, Ohio, the farm his grandfather, our ninth President, acquired by a land grant.

Theodore Roosevelt operated a ranch in Dakota territory.

William H. Taft's parents came from New England. During the Taft presidency, the city of Tokyo made a gift of cherry trees to the city of Washington.

Calvin Coolidge, our 30th President, was born in Plymouth, Vermont, to a farmer and storekeeper.

Herbert Clark Hoover, born in West Branch, Iowa, was the first President born west of the Mississippi River. His father was a blacksmith and in the farm implement business.

Franklin D. Roosevelt, although his parents were not themselves farmers, was related to farmers and to 11 former Presidents: Washington, John Adams, Madison, John Quincy Adams, Van Buren, William Henry Harrison, Taylor, Grant, Benjamin Harrison, Theodore Roosevelt and Taft.

Harry S. Truman, born on a farm near Lamar, Missouri, later managed his father's farm in Grandview, Missouri.

Dwight D. Eisenhower went to school in Abilene, Kansas. The Gettysburg, Pennsylvania, farm was his retirement home.

A farm in Stonewall, Texas, is where Lyndon B. Johnson was born and became a part of his own ranch near Stonewall.

Farm life had a profound effect on these men, molding them to achieve top honor—President of the United States.

Sowing a

An Illinois FFA member has planted his career roots in the competitive world of hybrid seed suppliers.

IN the heart of the nation's midwest, fields of strong stalks rise boldly above vast expanses of rich, dark soil. This is corn country—land that bears millions of bushels of grain. This is land often called "the nation's breadbasket." It is worked by farmers who set yield per acre records then better the marks one harvest later.

Such farming is commonplace around Ursa, Illinois. Acres of corn planted near the small central Illinois town are interrupted only by highways, an occasional farmhouse or a noisy barn of hogs. Throughout Illinois, Iowa and Missouri, some 50,000 acres of corn grown for grain originated in a family business back in Ursa: Lewis Seed Farms, Inc.

Lewis Seed Farms is a true family agribusiness. Corporate farming, yes, but family. Frank Lewis, who originated the company in 1941, still works the business along with his son, Larry, and 17-year-old grandson, Scott. Scott's mom, Nancy, and 14-year-old brother, Shawn, also pitch in.

Scott, recently named Illinois' Star State Agribusinessman, works well alongside his dad and grandpa. So well, in fact, that he has helped with the operation from an early age.

"The blight year of 1970 really boosted our corn seed business," says Larry, an aggressive general manager who introduced Lewis corn lines in the early '60s. "When our 12 varieties pulled through, we sold out the next year. Scott has been involved ever since. He's always done a variety of work; driving machinery, sorting and culling corn, weighing trucks—just a few of his daily chores."

Scott, a tall, alert young man, listens quietly to his father's remarks. His introduction to the seed business has been a busy preview up to now. Following college, with a major in agronomy and

Scott shows off prize ears of Lewis hybrid corn, the true rewards of selective plant breeding.

"Corn Gold" Future

By Jeffrey Tennant

Loaded trucks must be weighed to maintain inventory control on corn.

studies in agricultural economics, Scott will shoulder even more responsibility. But the business must be understood to imagine the work involved.

"Basically," shares Scott, "our business goal is to supply a good quality seed to farmers. Although we deal mainly with seed corn, we also provide soybean, oat and wheat seed. We have 24 varieties of corn—hopefully, something for everyone."

Scott explains the primary differences farmers look for when purchasing seed for their crop. "Seeds vary considerably. In corn, there's a significant range in maturation dates, stalk strength, ear heighth and plant heighth. We've bred each variety we sell and continue to experiment."

Lewis farms includes 450 acres of corn grown exclusively for seed. A ten-acre breeding nursery of experimental corn varieties boasts 500 different "inbreds," or plants established for testing purposes. Each inbred in the nursery is grown from "foundation seed stock," that is, seeds purchased by the Lewises for observation purposes.

To develop a single cross seed for selling, the Lewises develop a supply of seed from each of two inbreds that exhibit superior characteristics. The inbreds' seed is then planted in the same field, two rows of one type to serve as males and six rows of the other—the females. The entire field is planted in this 6-row/2-row arrangement for a reason.

"Corn farmers want single cross plants like that one," says Scott, pointing from his pickup to a dryed corn stalk displaying several large ears. "Ears from single cross plants are far superior to inbred ears. Plant genetics play a big part in this business. For instance, to obtain a single cross, we cross inbred 'A,' the males, with inbred 'B,' the females, to get single cross 'AB' ears. The 'AB' ears, produced by female plants, have hybrid vigor and are sold to farmers for planting."

The crossing of plants is a natural process helped along by the Lewises and their workers. Much of the work is done in July when 50 to 60 people, many of them vo-ag students, take to the fields.

"It's called detasseling," says Scott of the first step in creating a hybrid ear. "We cover the fields four to six times and pull the tassels from female plants. From important planting records we know which six rows are female. The two rows of males are left untouched. Pollen from the tassels of the male plants, inbred 'A,' will be carried by the wind to the ear silks of the detasseled females, inbred 'B.' The resulting ears on the females from the cross of both inbreds is hoped to display a combination of each inbred's superior traits."

"Each pollen grain," explains Larry, "finds its way down a corn silk. Each silk is actually a tiny, hollow tube that represents one kernel of corn. The six crossed rows bearing the hybrid 'AB' ears are harvested and the two male rows are left standing. The male ears, still just an inbred, are then used for livestock feed but not for replanting."

Once the rows of hybrid seed corn are harvested, usually at an average of 60 bushels per acre, the seed is in its raw stages. Much preparation is necessary before the seed finds its way to a bag.

"The seed starts on the ear," explains Scott. "It's taken to a conditioning plant, unloaded in an elevator and run through two husking beds if necessary. The ears then run across a sorting table where they're handsorted. Graders discard 'rogues,' or off-varieties, foreign material and male ears that were accidentally harvested.

"Acceptable single cross ears are conveyed to another elevator in a dryer building. The corn is dried to 10 or 11 percent moisture, shelled and cleaned. After removal of foreign material and broken kernels, the kernels are machine graded by size. An aspirator removes all the dust before the kernels are bagged for selling."

Eight hundred bushels of corn can run through the Lewis operation in a day's time. On a good day, 1,000 bags of corn are turned out ready to sell. Each 80,000-kernel bag, at an average price of $50, contains seed for 3½ acres of feed-grain corn.

"Our pride and joy," says Larry, "is when a farmer tells us he's hit over 200 bushels an acre using Lewis seed. We compete with over 30 seed companies, some of them huge corporations, so it's satisfying to see our seed provide good results."

(Continued on Page 45)

Scott pitches a "rogue" off the grading belt, just one of a hand-sorter's jobs. Every ear is O.K.'ed or culled before continuing the bagging process.

Agricultural Careers

The massive industry of agriculture employs one-fifth of the nation's workers and may hold a job for you.

By K. Elliott Nowels

Every day holds more work in vegetable production for valley farmer Mike Costa.

IT'S tough to plan a career.

Oh, yes, it's easy to fall into a job, perhaps. But the word *plan* is the catch—actually determining ahead of time exactly what you want to do with your life. What can you do that will make you happy, and even happier yet with the knowledge that you are assisting society's progress in some way?

Today's agriculture and all the jobs that get food and fiber from the farm's gate to the consuming public is, for many, the key to self-satisfaction in life. The pride in aiding the production of food and fiber for millions of Americans and people of other countries is a common bond among those involved.

Maxine Weaver, a Colorado ag teacher, had to prove herself to her students.

Figures released by the U.S. Office of Education indicate that over 400,000 people are needed each year in agriculture/agribusiness careers. Of that number of vacancies, only 109,000 are currently being filled by people trained in agriculture. These are not, for the most part, jobs that require advanced degrees of education. They are open to individuals that have gained agricultural skills in high school vocational agriculture/FFA.

The people interviewed on these pages represent several of the faces of agriculture in this country as they work with plants, animals, food, fiber or machines. We present their experiences, attitudes and enthusiasm so that you might gain a sense of what can be satisfying about agriculture, the path you might take in it and how you might achieve success.

Maxine Weaver: Vo-Ag Teacher

Maxine Weaver, an ag teacher at Cortez, Colorado, doesn't care much about making a big noise in the sex equality movement. She just enjoys being able to do what makes her feel satisfied with life, and right now that is teaching vocational agriculture and working with FFA.

"There's something about this career you can't measure with the dollar sign," she says. "It's just the feeling you've helped someone set their course and maybe make some headway toward their goals."

Maxine graduated from Colorado State University and became the first woman certified to teach vo-ag in the state. Raised on a ranch with the chores of caring for cattle and horses, Maxine had a solid background for the job but it took some getting used to—for both her and her students.

"It was new at first," she admits. "A lot of students didn't know what to expect or whether to accept me. I just showed them I could teach the skills they needed to know and that I was confident in myself." Maxine is now well-accepted in the community, having shown a diversity of skills important to her chosen career.

Mike Costa: Ag Production

Year-around vegetable production in California, with the sometimes complex challenges of weather, labor relations and mechanization, still holds plenty of interest for Mike Costa, who farms in the Salinas Valley.

"When you're in a partnership," Mike says, "it's a little bit different than if you're just working for wage. When you gain part ownership, that makes it much more intersting."

The hours working at tillage, sprinkling, cultivation and harvest may be long and dusty in the valley, but the reward is a yield on lettuce, broccoli or onions that nears the best in the valley.

"If we didn't produce good yields, then it would be time to get out of the business," adds Mike. "But we have a good start and it would be nice to grow a little bit more when I get out of school."

Mike now divides his time between California Polytechnic State University and home. His chief interest in college is crop science, more specifically pest control and chemical use. Improving his marketing expertise is another goal. Mike continues to be positive about his future in vegetable production. "There's a lot of things you can get into and be successful at," he says. "You just have to really want to do it."

Through ag mechanics, Greg Parker is aspiring to "a little bit better" life.

Greg Parker: Ag Mechanics

A simple steady job and paying the bills is not what life is all about, according to Greg Parker, a 1979 graduate of W. B. Saul Agricultural School in Philadelphia. "I want to live a little bit better, and

(Continued on Page 24)

This story is a sample of a more complete look at ag careers taken in Your Career in Agriculture/Agribusiness, *a brochure developed by the FFA and available through the National FFA Supply Service, Alexandria, Virginia 22309.*

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How Will the Farmer Fare?

THE decade born with 1980 brings cause for excitement in the industry of agriculture. Never before, even in the '70s, have farmers and agribusiness people faced a greater challenge to produce. Fewer farms, fewer farmers, more mouths to feed, more stock to fatten—the challenge presents itself in obvious terms.

For nearly five decades, a meeting of the minds among agricultural forecasters has unfolded in Washington, D.C. Economists, world trade analysts, commodity specialists and ag-industry officials foretell the coming year in U.S. farming.

Forecasts are based on statistics, current trends in commodities and supply/demand factors. When based on science, predictions dealing with each major farm product are reliable. The USDA and other agencies keep close watch on worldwide production and consumer demand for food and feed.

Here, according to the experts, are the futures of major farm products for 1980:

Wheat. Overall farm prices are expected to increase only moderately for 1980, but wheat could be an exception. Wheat prices were up to nearly $4 per bushel at the close of 1979, up a third from a year ago. Wheat producers will likely see good returns in the 1979-80 marketing year due to reduced production, record trade levels and reduced stocks. Worldwide production is not contributing to the supply picture, as only three nations will have larger crops than last year. Exports are expected to demand 200 million more bushels than a year ago, one of the utilization factors that will offset the 18 percent increase in harvest from 1978. Expect prices for 1979-80 to average $3.60 to $3.90 per bushel.

Rice. World rice production is forecast at 374 million tons, 3 percent below last year's record but still the second largest ever. Utilization of rice will likely remain near earlier levels but world rice trade should keep pace with increased production. U.S. rice production is forecast at a record 6.3 million tons. With large carryover stocks, total U.S. supply will be up. Exports and domestic demand are also up, though, so early season prices will be good. Prices for 1980 are projected to average from $8.75 to $9.75 per cwt. (hundredweight).

Soybeans. U.S. oilseed production —soybeans, sunflowerseed, flaxseed, peanuts and cottonseed—doubled during the '70s. Soybeans, which make up 85 percent of the oilseed output, should continue upward in production. This year's record soybean crop—18 percent above last year's—and a prospective buildup in carryover stocks indicates average prices to producers in 1979-80 of $6.25 per bushel. Increased supplies and transportation problems are expected to keep prices below last year's average of $6.75.

Beef and veal. Total cattle and calf slaughter in 1980 is expected to resemble the 1979 level. Because of a reduction in slaughter during 1979, total inventory should rise and commercial beef production answer with a 12 percent reduction. Fed cattle prices rose to record high levels in 1979. Advances in 1980 cattle prices will be limited by large supplies of competing meats, such as pork and poultry. In markets such as Omaha, expect prices to average over $70 per cwt.

Pork. World production of pork has increased each year since 1975. Another increase is anticipated for 1980 with much of the increase coming from the United States. Commercial pork production for 1979 totaled nearly 15 percent more than 1978; 1980 production is expected to be a tenth larger than last year's. Continued large supplies of poultry, a "substitute" meat for pork and beef, will keep hog prices at relatively low levels this year. Barrow and gilt prices in the low-to-mid $30's appear likely through the spring. Prices could strengthen later in the year.

Poultry, lamb and mutton. These

(Continued on Page 45)

Plan to farm or ranch?
Work in agribusiness?
Go to college?

Whatever you do, the more you learn in high school and FFA, the better prepared you'll be.

That's why we encourage students and recognize jobs well done

There's a bright future in agriculture for well-trained and dedicated young people. Not only in farming and ranching but also in agribusiness and in other careers serving farmers and ranchers.

So we encourage students to do their best. And we try to do our part recognizing them for jobs well done. After all, our future depends on agriculture—the farmers and ranchers who buy our livestock feeds, minerals, parasite-control products and livestock equipment.

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Since 1958, our contributions have helped honor outstanding FFA members at the chapter, state, regional and national levels.

Also since 1958, our contributions have helped honor outstanding 4-H Club members at county, state and national levels.

For the 21st year, we're sponsoring scholarships at agricultural colleges. At each, we contribute the same amount for MoorMan Scholarships. But the number and individual dollar amounts awarded at each university are determined by its ag scholarship committee. They also select winners—with no influence or interference from our company. This school year, MoorMan Scholarships are being awarded at these 29 universities:

University of Arkansas, Fayetteville
Auburn University, Auburn, Ala.
Clemson University, Clemson, S.C.
Colorado State University, Fort Collins
University of Florida, Gainesville
University of Georgia, Athens
University of Illinois, Urbana
Iowa State University, Ames
Kansas State University, Manhattan
University of Kentucky, Lexington
Lincoln University, Jefferson, Mo.
Louisiana State University, Baton Rouge
Michigan State University, East Lansing
University of Minnesota, St. Paul
Mississippi State University, Starkville
University of Missouri, Columbia
Montana State University, Bozeman
University of Nebraska, Lincoln
New Mexico State University, Las Cruces
North Carolina State University, Raleigh
Ohio State University, Columbus
Oklahoma State University, Stillwater
Purdue University, West Lafayette, Ind.
South Dakota State University, Brookings
Southern Illinois University, Carbondale
University of Tennessee, Knoxville
Texas A&M University, College Station
University of Wisconsin, Madison
University of Wyoming, Laramie

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A no-till corn seedling sprouts from its necessarily narrow seed bed.

Testing No-till Farming

Here is what one chapter found out when they took a hands-on look at a new farming method.

WILL no-till farming really work? It's hard to pick up a farm magazine these days without seeing yet another article about this relatively new cropping technique. Just reading about no-till wasn't enough for an eastern Iowa FFA chapter, however. They decided that the best way to learn about no-till was to try it themselves.

One year later, vo-ag instructor Dave Coppess and the Lincoln Community School FFA Chapter (Stanwood-Mechanicsville, Iowa) are firm believers that while no-till may not fit every situation, it is definitely "possible," at least on eastern Iowa soil. Their first no-till attempt produced 153-bushel per acre corn. Coppess says that mark is a "little above average" for all corn production in the county.

What, exactly, does no-till involve? The technique originated in the southeastern United States more than 20 years ago. Corn producers in states such as Virginia and Kentucky realized that by retaining year-round ground cover, they could sharply reduce soil erosion on their sloping farmland. And, of course, the best way to keep ground cover in place is to eliminate field tillage.

Only recently, however, did no-till become a practical cropping alternative. Weeds were the number one culprit in early days. No-till pioneers used everything from diesel fuel to fire to "burn down" weeds before planting. But those methods were poor alternatives compared to the modern herbicides presently available to no-till farmers.

Growers can now use a contact herbicide, like Ortho Paraquat CL, for quick knock down of grasses, broadleaves and perennial weeds that exist at planting time. Paraquat has no residual activity, so it's usually tank mixed with residual herbicides such as atrazine. Such chemicals are selective in nature and are included for control of later germinating weeds.

Just before or after herbicide application, the grower uses a specially designed planter to drop seed with a minimum of soil disturbance. Implements rely on notched, serrated or knife fluted coulters to cut through trash or sod, then open a narrow strip for seed placement. Generally, the seed bed is only one to two inches wide.

After planting, the grower's next step is usually harvest. By adopting no-till, five or more trips across the field can be eliminated. Reducing field machinery work cuts overhead costs and minimizes labor requirements. Proponents of no-till also argue that reducing field tillage improves soil tilth and the ground's water holding capacity.

Advisor Coppess notes that Lincoln FFA has conducted test plots during the past several years to measure results from different seed corn varieties, fertility programs and other crop production variables.

"We were discussing what we should do with this plot," he explains. "To help us decide, we did a survey of our adult farmer class. There seemed to be a lot of interest there in different tillage methods. Our local soil conservation and extension services are active with no-till, so we asked for their guidance."

Bill Klein, Lincoln FFA member and one of the group leaders for the project, says chapter members favored a no-till test plot because of overall community interest in the technique.

"Besides having a money making project, we just wanted a change from previous years," says Bill. "We also handed out questionnaires to the rest of the class, and they largely wanted no-till."

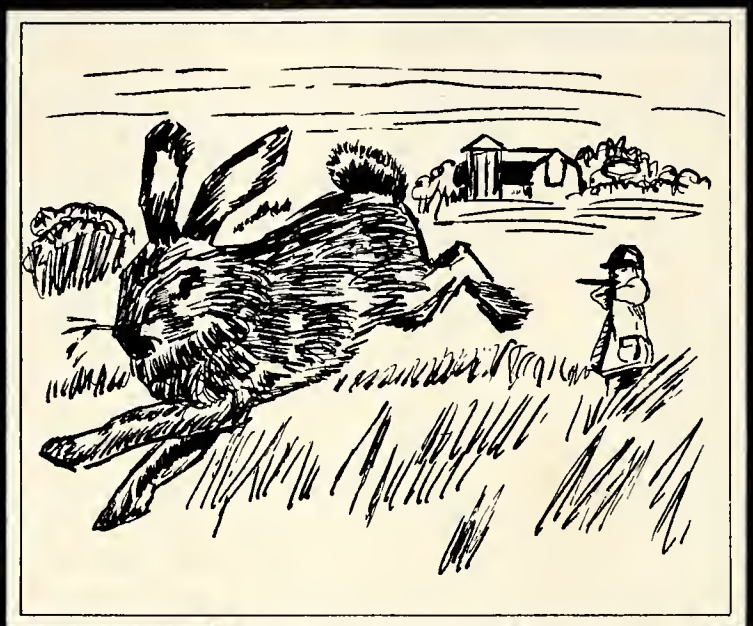
A six-acre plot for the test was rented from Ray Linder, teacher at Lincoln Community School and part-time farmer in Cedar County. The field had been in corn previously, so the plot—divided equally between conventional, minimum till and no-till—consisted of varying degrees of crop residue cover at planting.

"I had seen fields of no-till corn before," says Tom Poduska, also a chapter member and project group leader. "On some of those fields, if the right chemicals weren't used, or if chemicals were used improperly, weeds could really be a problem. But we didn't have very many

(Continued on Page 22)

Lincoln FFA members (from left) who served as project group leaders are Bill Klein, Jeff Schnipkoweit and Tom Poduska. Advisor Coppess is at right.

Shooting Is More Fun When It Costs Less



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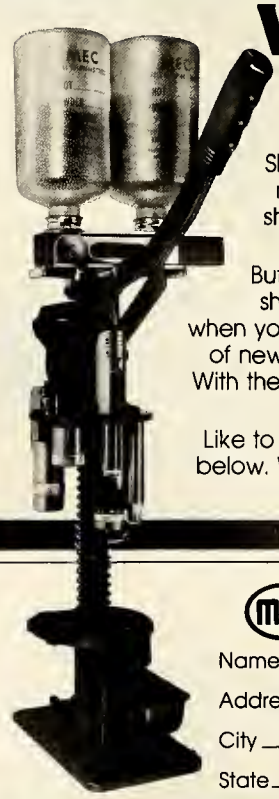

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No-till Farming

(Continued from Page 21)

weeds. The plot did a lot better than I thought it would."

Members had an opportunity to operate no-till implements on FFA plots rented by the chapter. The chapter also hosted a field day to demonstrate their program to area farmers. Throughout the entire growing season, members kept close tabs on inputs and returns from all three parts of the plot.

FFA members reported satisfaction with their first results but say they want to continue testing no-till. "I do think there will be more no-till corn grown around here," says Dave.

"I believe the fuel crunch will bring about more of it," added chapter member Jeff Schnipkoweit. While university crop specialists estimate that it costs about the same to control weeds with herbicides as it does with field tillage, those figures could change if diesel fuel prices continue to climb.

FFA No-till Corn Test Plot
Stanwood, Iowa

Costs (per acre)	Conventional	Minimum Till	No-till
Plowing	$ 7.30	$ —	$ —
Disking	7.20	14.40	—
Cultamulching	5.20	—	—
Planting	4.50	4.50	4.50
Phosphorus and Potassium	17.97	17.97	17.97
Nitrogen	28.08	28.08	28.08
Seed	16.07	16.07	16.07
Insecticide	6.30	6.30	6.30
Herbicide (Lasso & atrazine)	12.75	12.75	12.75
Paraquat	—	—	10.00
Land	95.00	95.00	95.00
Insurance	4.50	4.50	4.50
Harvest	17.00	17.00	17.00
Total Costs	**$221.87**	**$216.57**	**$212.17**
Harvest Stand	21,000 plants/ac.	25,000 plants/ac.	25,000 plants/ac.
% Barren Stalks	14%	17%	21%
Yield per acre	109 bu/ac.	114 bu/ac.	153 bu/ac.

No-till soybeans are also gaining popularity in eastern Iowa, as well as the rest of the country. No-till small grain crops are gaining acceptance in High Plains states. Stockmen are finding that stronger beef prices warrant more intensive pasture management. Under the watchful eye of testers such as the Lincoln FFA, no-till is slowly proving its place in the fields of America.

FFA Movie Due for Release

ONE of the largest youth extravaganzas in the United States is about to become available to yet more people. The National FFA Convention is being made into a movie.

Convention Time—FFA is the work title of a film now being developed by the national FFA organization through the sponsorship of the Coca-Cola Company of Atlanta, Georgia. The film is a special project funded through the National FFA Foundation.

Utilizing footage made of the last three conventions, the film will give a sample of the inspiration, enthusiasm and competitive spirit generated by FFA members at the National Convention. Also included are brief excerpts from appearances of national celebrities who have graced the stage in Kansas City, the annual site of the convention.

"Only about 20,000 of the FFA's total membership come to any given National Convention," says Elliott Nowels, FFA director of information, "so it certainly seems that the convention film would hold extreme interest for the over 450,000 members that aren't at the convention each year."

Nowels says Coca-Cola's sponsorship will also allow the FFA to film each of the next three National FFA Conventions in preparation for another film to be made in the forepart of 1983. In addition to the production of this year's film, including the making and distribution of 100 prints, Coca-Cola will fund filming that will likely go toward the production of a new film.

Venard Films, Limited, of Peoria, Illinois, handled the filming at the 1979 convention and are now involved in the necessary editing and sound synchronization that precedes a final print.

"We didn't know a film would be sponsored until the week of the convention," says Nowels. "Fortunately we had Gary Smith and Bob Wanzel of Venard Films on site to produce some TV spots and they agreed to film needed parts of the convention without hesitation."

"So much has happened during the last several conventions and we have so much footage, it's a challenge to edit it down to a size that will be inside a half-hour," says Gary Smith, president of Venard Films.

Venard Films is no stranger to the FFA, having done the *Stars Over America* films, *Agriculture's New Generation* and *FFA—The Learning and The Land*, a Firestone-sponsored film which won an award for the best agriculture film of 1978.

"I think *Convention Time—FFA* will be a real winner for all kinds of audiences, whether it be civic organizations, vo-ag classes or other more general audiences," says Smith. "Many people don't realize that FFA has the largest youth convention in the nation and can draw people like President Carter or newscaster Paul Harvey to address it."

According to Nowels, final filming was recently completed. FFA hopes to premiere the film in Atlanta when the National FFA Officers visit the Coca-Cola Company in late February. After its premiere, the film will go to print production and should be available for distribution by April 1, 1980.

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Careers

(Continued from Page 16)

help everybody else live a little bit better." Greg explains.

A resident of downtown Philly, Greg didn't let his non-agricultural background deter him from his interest in ag careers. He studied all phases of agriculture at W. B. Saul. As a student, Greg excelled in ag mechanics in FFA competition and day-to-day practical application while working for his grandfather in a rural part of Chester County, Pennsylvania.

The mechanic credits his grandfather with building his self-esteem. "He'd be proud to see me learning, and that motivated me a lot." Now Greg is attending college to learn more about engineering, including machinery design and application. "Each of us has a responsibility to make a place for ourselves in this world. Not necessarily to make a big name, but to contribute something while we are here."

"Good common sense" is the key to the successful ag career of Lori Carpenter.

Lori Carpenter: Floriculture

"The best part is when people come in and really like the shop, and they praise us for it," says Lori Carpenter of her position of managing the Garden Gallery, a plant shop in Morro Bay, California.

Lori tired of pursuing a college degree in journalism and has found much satisfaction in her present job. She now urges strong consideration of non-college options after high school for young people and has some other pointers for those starting out.

"I think if you are level-headed and have good common sense, those are the important things." Lori cites those traits as having more to do with her holding the manager's job than her knowledge of plants. Taking initiative and being responsible are two more important traits, she says. "Employers and co-workers appreciate knowing that you care."

Lori likes open communication lines with her staff and says good human relations can certainly affect business. "Your customers can tell the minute they come into the shop the way it's run. If it's a cold feeling, they won't come back."

Don Schillinger: Processing

Don Schillinger of Des Moines, Iowa, wants to stay in some form of agricultural career, and right now that means cutting and delivering meat. "Everybody eats, and most people eat meat," Don says, commenting on the security of his acquired skill. "Meatcutting is a job you can get almost wherever you go. You can find packing plants in almost any town."

Don would like to eventually raise hogs on his own, but finds it difficult, having an urban background. "You can't jump right out onto a farm," he says. "I'm learning a lot right now that would help me if I ever do get my hog set-up."

Don cuts meat about seven hours a day and spends four to five hours delivering the cuts. "I enjoy working with all the different people in the shop and on the routes," he says. "I like to move around and appreciate the opportunity to be outside part of the time."

Don Schillinger is meatcutting his way toward a goal of full-time hog farming.

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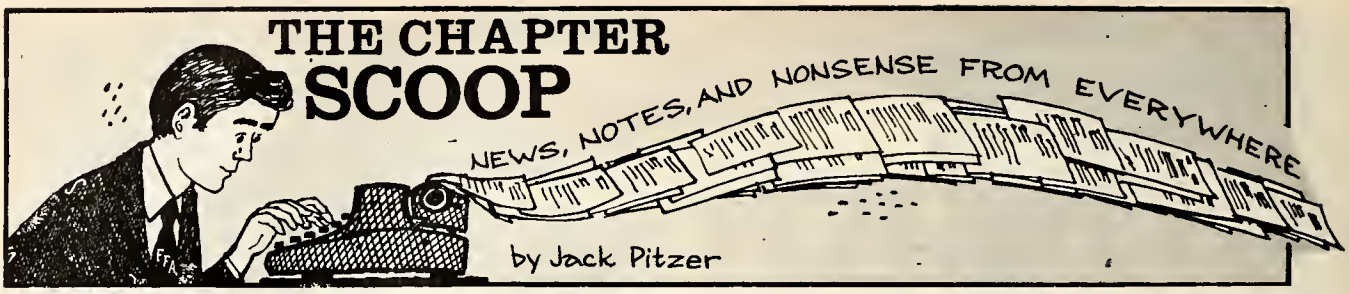

A can of food got you into the *Norfolk,* NE, Thanksgiving dance. The 432 cans went to the community's food pantry.

N-N-N

"This little pig went to market" was the *Pinedale,* WY, first place float entry in the homecoming parade. Theme was nursery rhymes.

N-N-N

After they won all events at the leadership conference, *Furr,* TX, FFA team members from Houston got an all-you-can-eat shrimp dinner by their advisor.

N-N-N

Winners of the Greenhand Creed contest in *Smith Mountain,* VA, Chapter were **James Craghead,** three silver dollars; **Terry Gray,** five dollars; **Darrell Musleman,** ten dollars; **Rob Thurman,** fifteen silver dollars and **Robert Harper** who won first and a new official jacket.

N-N-N

The annual hamburger Christmas party of *Red Oak,* TX, broke all kinds of eating records according to Reporter **Ken Cooper.**

N-N-N

An FFA polka band cooperative was formed by *Wilber-Clatonia,* NE, FFA to play at state fair and state ag days.

N-N-N

It was a free FFA watermelon feed to celebrate opening of their new vo-ag shop at *Manhattan,* KS.

N-N-N

South Side, AR, FFA went camping and took **Lenny Hoover** snipe hunting.

N-N-N

Scott Marshall, *Norfolk,* NE, member is the new president of the nation's first junior pork producers' organization recently organized in Nebraska.

N-N-N

In *Wewoka,* OK, FFA cut, stripped and hauled sugar cane for the big Sorghum Day celebration in their town. Proceeds went to the Seminole Nation Museum.

N-N-N

Nine chapters participated in the second annual parliamentary law contest sponsored by *Carthage,* MO, and their alumni affiliate for state champion teams from around the nation. *Central Preston,* Kingwood, WV; Colton, WA; *Fairbanks,* Milford, OH; *Little Dutchman,* Annville, PA; *Plainsville,* KS; *Waverly,* NE; *North Linn,* Coggon, IA; *Mansfield,* MO; and *Clinton Central,* Michigantown, IN.

N-N-N

The *Sandpoint,* ID, Chapter of FFA has now designated three members to share the job of Scrapbook Reporter.

The Alumni affiliate presented a Holstein calf to **Sandy Carlson** who was selected by the *Housatonic Valley,* CT, Alumni calf chain committee.

N-N-N

There were 94 members and guests at a recent *Oakland,* OR, Chapter meeting. How many of you are faithful about attending your chapter meeting?

N-N-N

Greenhand initiations are happening in most chapters. *Lancaster,* OH, had 18 earn that degree. They had to dip their hands in green paint.

N-N-N

New Greenhands for *Highland Home,* AL, are **Ed Harris, John Douglas, Carl Mosely, Darrel Harris, Darel Bell, Randel Bradly, Danny Brown, Kristifer Bryant, Joe Davis, Pat Johns, Willie Means, Russel Roberts, Billy Sexton, Johnnie McGough.**

N-N-N

Part of the initiation of 11 Greenhands in *St. Marys,* OH, was to sing "Old MacDonald's Farm."

N-N-N

The new Greenhands in *Hawthorne,* FL, were assigned to a Chapter Farmer to be his or her slave for a day.

N-N-N

Debbie Smith reports a record number of 64 new Greenhands for *Allentown,* NJ. The crowd of members and guests was so large they had to move the ceremony out into the shop.

N-N-N

Franklin Pierce, WA, Chapter member **Gene Rogers** earned the very first American Farmer degree ever earned in their chapter.

N-N-N

When *Franklin,* NE, entered a team in the war ball tourney among area chapters, their school cheerleaders and pep band held a pep rally for the FFA team.

N-N-N

Bertha-Hewitt, MN, sponsored a skate-a-thon. The 30 entries completed the eight-hour, 67-mile marathon and earned $1,100 for handicapped kids.

N-N-N

A benefit concert by *West Morgan,* AL, FFA band raised $1,000 for their school's coach after his auto accident.

N-N-N

Parker, AZ, Chapter held a class to certify all officers in CPR.

N-N-N

A committee of **Robert Freeman, Kevin Rubish, Erik Valance** and headed by **Matt Wallman,** of *Oakland,* OR, FFA gave fire safety presentations to kindergarten through fifth grades classes.

Sergeant **Fred Davis** who was the marine in the Joint Military Color Guard at this year's National Convention was chapter president of the *Pleasanton,* KS, FFA and attended the 1973 convention.

N-N-N

Advisors and 20 members of *Cumberland,* VA, FFA patroled county schools on Halloween night as a service project.

N-N-N

And *San Luis Obispo,* CA, FFA sold Spook Insurance.

N-N-N

Smyrna, DE, citizens were invited to a Wood Stove and Chain Saw Safety Seminar sponsored by FFA. Speakers included state extension safety expert and a chimney sweep. A chain saw was given as a door prize to a lucky attendee.

N-N-N

On the way to and from the National Convention, VA state officers conducted vespers service on their buses.

N-N-N

Aledo, IL, held its annual Hare and Hound race where participants follow a trail through timbers and fields sure to get folks lost. It sounds like fun.

N-N-N

Try to get all of the guys in your vo-ag class to join FFA. You surely can give a couple of reasons why you're into FFA.

N-N-N

FFA resurfaced the school parking lot for *Fredericktown,* MO.

N-N-N

Monroeville, OH, village firemen and the FFA members there conducted a family home fire safety program.

N-N-N

New Prague, MN, members helped solve a need in the Green Giant canning factory. FFA received $10 per person plus member received his individual wages.

N-N-N

An alumni member demonstrated how to fit and show at the *Bushnell-Prairie City,* IL, FFA showmanship day.

N-N-N

Officers of *Pettisville,* OH, appeared on a talk show "Time Out for Teens" on radio WHFD.

N-N-N

Pumpkins from the faculty pumpkin carving contest in *Soquel,* CA, Chapter were given to local convalescent homes.

N-N-N

On dress up day during FFA WEEK, *Mountain Lake,* MN, asks the faculty to select "Dude of the Day." He is given an alarm clock—to get up early enough each day to "dude up."

N-N-N

Everybody ought to see their chapter name in this column sometime each year.

Forming the Future

Larry DeWitt, Sunbury, Ohio
1979 National Home and Farmstead Improvement Winner

Initiative. Larry DeWitt has it...the drive to set goals and the willingness to work hard to achieve them. And for his long list of accomplishments, Larry was named winner of the 1979 National FFA Proficiency Award in Home and Farmstead Improvement.

Sponsoring this award is The Upjohn Company's way of saying we want to help FFA members prepare for the future.

As a member of the Big Walnut FFA Chapter at Sunbury, Ohio, Larry received valuable encouragement from his vocational agricultural instructor, H. L. Snyder. "Larry is an example of a real go-getter," says FFA Advisor Snyder. "The family farm has not only taken on a new look, but chores and other farm work have become more efficient as a result of his improvement projects."

Larry has devoted over 1,800 hours during the past five years to such projects as constructing barns, livestock facilities and grain bins; thinning and pruning woods; improving recreational facilities and fish and wildlife areas; re-routing a creek and landscaping; siding and insulating the house; and building fences with lumber he prepared at the family's sawmill.

With the knowledge he's gained through these and many other projects, Larry plans even more ambitious farm improvements in the coming years.

Right now, he is attending Ohio State University's Newark Branch and plans an agricultural career.

The Upjohn Company's entire Agricultural Division takes pride in recognizing the achievements of Larry DeWitt and regional, state, district and chapter winners. We also want to encourage all FFA members to participate in "Forming the Future" through involvement in the FFA Home and Farmstead Improvement Program.

Upjohn TUCO asgrow Cobb

Upjohn, TUCO, Asgrow, and Cobb Organizations
Agricultural Division of The Upjohn Company
Kalamazoo, Michigan

From Project to Profit

Jerry Barta's FFA occupational experience program has led to a growing farm enterprise and a management challenge.

For many young Wisconsin farmers, the projects they carried out as members of the Future Farmers of America have served as valuable lessons for careers in agriculture. But for one extraordinary young man from Kewaunee County, an FFA project has blossomed into a full-fledged—and profitable—business.

In just 2½ short years, Jerry Barta, 18, of Rio Creek, has watched his high school project grow to a 60-sow, farrow-to-finish operation that produces almost 900 hogs annually. "Jerry is really the expert in our hog operation," relates a proud Don Barta, Jerry's father.

Asked how he first became interested in hogs, Jerry responds, "We were always into beef, but when the market began to drop in 1976, Purina District Manager Bob Bennett suggested we try our hand at raising pigs. I talked it over with my dad and decided to give it a try in my high school FFA project. Since then, the whole operation has really taken off."

Jerry started raising feeder pigs and selling them when they weighed 40 pounds. Later, he decided to expand his business to include a farrow-to-finish operation. "With the same amount of effort, we can feed out our hogs and get a better price for the extra feed and labor we put into them," Jerry points out. Jerry markets hogs weighing between 220 and 240 pounds on a grade-and-yield basis to a local buyer. This bold, yet rational style of thought has impressed many of the people that Jerry has come into contact with.

"You can't say enough about him," says Bennett. "He's an excellent manager, keeps good records, and gives the hogs the time and care they need. Both Jerry and his father are extremely thorough and very attentive to their operations. They want programs that will provide them with optimum performance. If they aren't getting it, they'll know right away and they'll switch."

Jerry tests different feeding programs and spends time evaluating which rations work best for him and his hogs. "I compare different rations based on best results," he says. "At present, I'm feeding my hogs with Purina's High Octane Hog Chow. It's an efficient feed and the pigs look slick and stay in better condition."

Averaging well above ten pigs per litter—his last eight litters averaged 12 pigs each—it's obvious that Jerry knows how to get the most out of his sows. "He can tell you in a second how many pigs each sow produced last year," says his dad.

Above, Jerry's father, Don, discusses his son's feeding program with Bob Bennett. Right, Jerry's smile reflects the success of his expanding hog operation.

Leaving nothing to chance, Jerry maintains an individual record card for each sow. The cards indicate breeding and farrowing dates, litter sizes, daily gains and feed conversions. Sows are kept in an open front barn, vaccinated twice a year for erysipelas and leptospirosis, and wormed three times a year. One week before farrowing, sows are washed thoroughly and moved into the farrowing unit.

Jerry also adds one more important prerequisite to his sow management program-care. "I think it's important," he asserts, "to spend a lot of time with the sows, especially after they've been moved into farrowing pens." All this care is obviously paying off because Barta sows are averaging 2.2 farrowings per year.

The phenomenal growth of Jerry Barta's hog operation has naturally created the need for new facilities. "We finished a new 30-by-70-foot finishing unit last November," says Jerry. "The unit gives us the facilities we need to finish our hogs most efficiently. It has really cut down on our labor."

The modified open front unit has self feeders, automatic nipple waterers and partially-slatted concrete floors. Two inches of insulation and automatic heating units maintain inside temperature in excess of 40 degrees Fahrenheit. The 240-head capacity unit has eight pens so hogs of different age groups can be separated. It also includes an office, a sow washing facility and a scale.

"We're really pleased with how well the finishing unit has worked out," Don reports. "The slatted floors and liquid manure system help keep the hogs clean and comfortable and it saves us labor."

With the operation continuing to grow, the Bartas have discussed the possibility of installing a cage nursery. It's likely to be a single deck nursery at first because, like his dad, Jerry wants to see it work on a small scale before investing too heavily.

When asked about long range goals, Jerry flashes a sly smile and responds: "I guess we'll have to plan on another finishing facility before too long."

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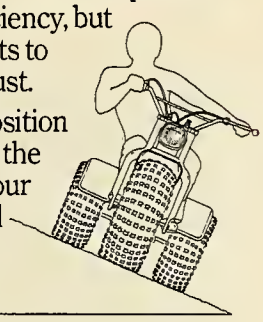
4 And Yamaha's Autolube system relieves you of the responsibility and mess of pre-mixing the gas and oil, while maintaining the ideal oil/fuel mixture for longer engine life. There's even an oil reservoir light to tell you when it's finally time to fill 'er up.

5 The transmission, kicked into life by an automatic centrifugal clutch, has five foot-operated forward speeds, including an ultra low with

6 A Capacitor Discharge Ignition means not only maximum performance and efficiency, but no breaker points to wear out or adjust.



7 The riding position on a Tri Moto is the direct result of our unique seat and frame design. The benefit is remarkable stability for a three-wheeler, even running side hill.

8 Up hill or down, the specially designed front fender keeps mud from accumulating on the underside.

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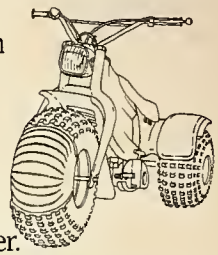

10 There's a disc brake in the rear for plenty of fade-free stopping power.

11 And an ingeniously engineered system waterproofs the air cleaner and carburetor. Just one more example of perhaps the best advantage of all.

12 It's a Yamaha.

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When you know how they're built.

Always wear a helmet and eye protection.

The FFA Alumni

By Wilson Carnes

THE FFA Alumni Association was officially organized on May 12, 1972, at the O'Hare Inn near Chicago. Nearly 200 people from 33 states were present for the organizational meeting. The group included FFA members, FFA advisors, vocational agriculture supervisors, farmers, businessmen and professionals with other organizations.

The new organization fulfilled a dream long held by FFA members and former members. Both the 1934 and 1935 Convention Proceedings contain a "Report of Alumni Organization Committee." But the Alumni organization being discussed in those early days of FFA was somewhat different from the Alumni organization that it is today. As originally discussed in the 1934 committee report, such an organization would provide, among other things, "A tie between the high school boy and adult farm organizations."

The Alumni Association that was finally created in 1972 is primarily a support group for vocational agriculture/FFA. Today there are 16,019 members with chartered state associations active in 48 states. Headquarters for the FFA Alumni is at the National FFA Center.

Before the Alumni was actually organized, developments were taking place that helped bring the organization into existence. Nothing much had been accomplished until the 1969 National Convention where the classification of "Associate Membership" was changed to "Alumni Membership" in the National FFA Constitution.

Next, a temporary executive council was appointed from members of earlier committees by the FFA Board of Directors and National Officers. A tentative constitution and by-laws were developed along with a proposed plan of organization and tentative budget.

A loan was authorized by the National FFA Board of Directors and National Officers in October, 1970, to begin the FFA Alumni Association. It was agreed that the temporary Alumni Council was to serve until the first election could be held as directed by the constitution and by-laws. Gus Douglass, commissioner of agriculture in West Virginia and former national FFA president, was selected to serve as chairman of the council and Dr. James Clouse, head of agricultural education at Virginia Polytechnic Institute and State University, as vice-chairman.

Representatives from 33 states and 19 local affiliates attended the first meeting.

Council Chairman Douglass presided at the organization meeting in 1972.

Jay Benham, a vocational agriculture instructor from Ohio, was employed as administrative secretary in January, 1971.

An operational procedure was developed with provisions made for chartering state associations and local units. Charter membership was adopted for all who joined before the first meeting. A life member class of membership was established.

By October, nine states had applied for a state charter. The first charters were presented at the 1971 National FFA Convention to: Kansas, Louisiana, Indiana, Ohio, Oregon, Texas, Oklahoma, Wyoming and Tennessee.

The FFA was now ready to officially organize an FFA Alumni Association. Plans were made to hold the organizational meeting on May 12, 1972, in Chicago.

In reporting the Chicago meeting, *The National FUTURE FARMER* said at the time, "You could almost feel the dedication, the aspirations, enthusiasm and ambitions those present had for the new organization." By the time the meeting was over, 31 states held FFA Alumni Association charters. Since the organizational meeting the Alumni has been meeting annually in Kansas City during the time of the National FFA Convention.

In 1976, Jay Benham resigned as administrative secretary and was replaced by Robert W. Cox, a former teacher of vocational agriculture and FFA executive secretary in Kentucky. The title of the position has now been changed to executive director.

Like the FFA, the Alumni finds much of its strength at the local level where members provide much support and a "helping hand" for the local FFA advisor and vocational agriculture teacher.

Nationally, the Alumni has a number of outstanding activities in progress. These include scholarships for FFA members to the Washington Leadership Conferences, memorial scholarships, conducting a series of leadership workshops at the National FFA Convention, being active in public affairs for FFA and vocational education, a newsletter for members, the Legion of Merit award, the FFA Alumni Outstanding Achievement awards and many other activities.

No longer is it necessary to end your FFA affiliation when your active membership is over. You can continue in the FFA for life—as a member of the FFA Alumni Association.

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The Nation's Best "Salute to Agriculture"

MIKE Stewart, a first year agribusiness major at the University of Arizona in Tucson, has been awarded first place in the national "Salute to Agriculture" contest sponsored by the Hesston Corporation, Hesston, Kansas. Stewart's 100-word message was developed into a public service television commercial and aired during the telecast of the National Finals Rodeo from Oklahoma City in December.

Mike, of Avondale, Arizona, is a member of the Aqua Fria FFA Chapter and a past state president of the organization. He was presented a $500 check for his winning entry during the opening ceremonies of the 1979 National FFA Convention in Kansas City. Four second place winners received checks of $250 each while ten third place winners were awarded $100 each. "The contest, for members of the FFA, is part of a continuing educational program to the American public on behalf of agriculture," says Howard Brenneman, president of Hesston Corporation.

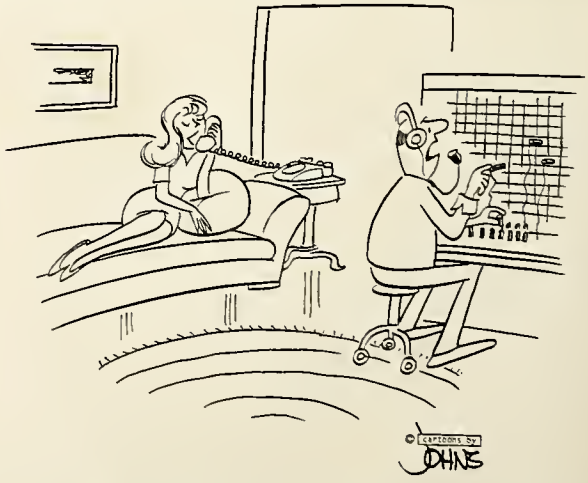
Hesston Corporation and participating Hesston Farm Equipment dealers, sponsors of the rodeo broadcast for a sixth straight year in 1979, estimated an audience in excess of 20 million viewers for the December 12 telecast.

Stewart's winning contribution says:

"From the timber land in Newfoundland to the cotton fields in California, one word is boldly stamped upon the North American terrain . . . agriculture! The checkerboard wheat squares of the Midwest announce it. The apple fields of Washington proclaim it, and the dairy farms of Wisconsin exclaim it: America is agriculture! We are the home of food production, the home of men who have used their plowshares to become the greatest agriculturists the world has ever known. America, be proud of agriculture, because agriculture is proud of America!"

Second place winners in the contest were: Daron Rudy, Alva, Oklahoma; Lesley Catherine Stinson, Cornelius, Oregon; Betty J. Shaw, Estacada, Oregon; and Anne Radintz, Statesville, North Carolina.

Judges in the competition were: Emmett Barker, president, Farm and Industrial Equipment Institute, Chicago, Illinois; Don Hargrave, president, National Farm & Power Equipment Dealers Association, Tipton, Iowa; and Allen Paul, president, Agriculture Council of America, Washington, D.C.



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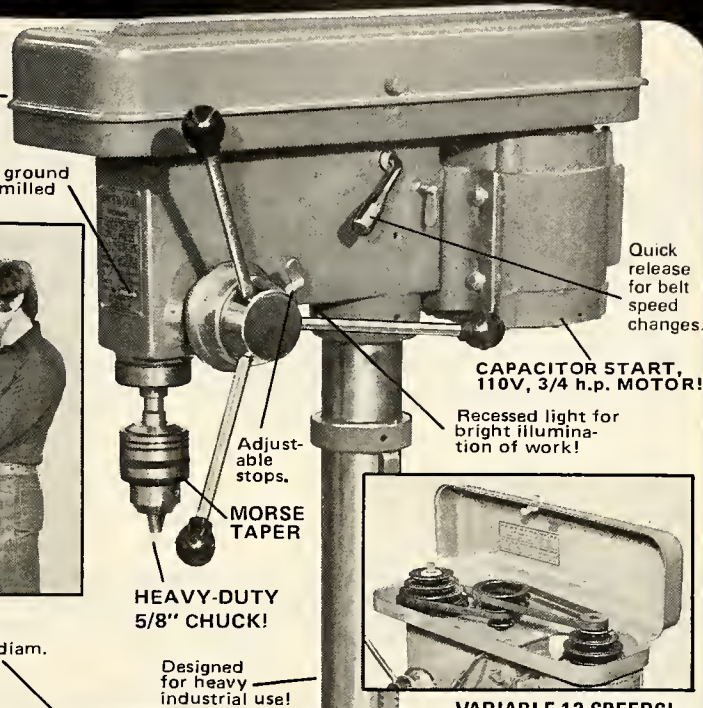
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Heavy walled machined column cuts down vibration!
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A big, 160 lb. heavyweight!

Heavy duty, by Milwaukee Pneumatic® with a ⅝" chuck.

Great for industrial use or home workshop!

Here's a heavy-duty, 14" drill press at a fantastically low liquidation price that's even less than those little "sissy" models!

This heavy, 160 lb. "brute" has all the power, all the "guts" you need for fast, smooth drilling into steel, cast iron, aluminum, brass, wood, plastic. Head and base are made of strong, fine-grained cast iron. Heavy walled machined column increases rigidity, cuts vibration for smoother operation. Standard NEMA 56 frame.

Oil table swings 360° and tilts 0° to 45°. Precise up and down movement of table with rack and pinion. Recessed light in head gives bright illumination of work. We dropped the price way down low to sell them FAST! Order yours right away!

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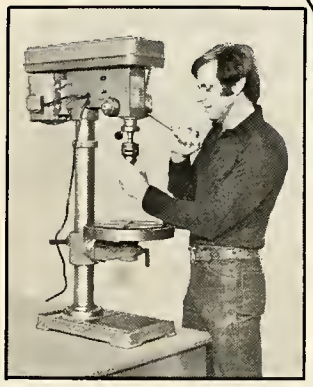
INCLUDES MORSE TAPER!



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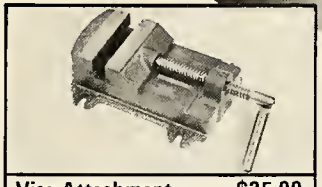

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FFA IN ACTION

Many young people are interested in "the way it used to be" on the farm and home.

YOUTH HAVE OLD TIMER DAYS

Over 5,000 residents of Union County, Ohio, and the surrounding areas attended the third Annual Old Timer Days on the John Holloway farm, northwest of Raymond.

Old Timer Days, a joint effort by the Holloway family, Marysville FFA, FFA Alumni and the Union County Draft Association, was organized to demonstrate to the community the tremendous advancements made in agriculture throughout the years.

Some of the events people were able to see include all types of horse drawn equipment in actual field operations as well as stationary displays. Horse teamsters, both young and old, demonstrated their abilities at driving their animals in such operations as plowing, disking, harrowing, dragging, logskidding, horse and pony pulling as well as in the halter and hitch show classes.

Visitors were able to see horseshoes being made by two different iron workers, demonstrations on firing flintlock muskets, buzz sawing and rough lumber cutting, micro-mini tractor and truck pulling.

One of the more interesting displays was a lady making apple butter on the grounds over an open fire, as they used to make it. She said, "This is a long process that takes all day and a lot of stirring and when it's done I sell it as fast as I can dip it into the cans."

Antique power equipment on display included old tractors, stationary power units and much antique tractor drawn equipment. A huge steam engine, threshing machine, corn shredder and other equipment were in operation during the show.

Over 100 people attended the square dance Saturday evening to the music of Del-Marrow Country Travelers.

Other more competitive events which took place during the weekend included corn husking, log chopping, two-man crosscut sawing, a tug of war, horseshoe pitching and nail driving. These contests were sponsored and run by the Marysville FFA members.

PUTTING THE FACTS IN COLD STORAGE

The Gainesville, Florida, Chapter at the Agribusiness Center initiated a safety program called "Vial for Life."

The program is designed to provide emergency medical information for trained personnel in the event the older Americans cannot communicate with emergency technicians, sheriff, deputies or police. All vital medical information is placed in a plastic hypodermic syringe case which is taped to a shelf in the person's refrigerator. A "Vial for Life" sticker is applied to the door in plain view for rescue people to see.

FFA has coordinated the project with local law enforcement agencies, emergency/rescue personnel and the Older Citizens Council.

Members of the chapter collected the vials to use from local hospitals, distributed them, along with information sheets and stickers for the refrigerators. Also, members helped citizens fill out the forms and tape them in place.

THEY COVERED THE BRIDGE WITH PAINT

One of Fairbanks, Ohio, FFA past BOAC projects was restoring a covered bridge. In this project we replaced 150 boards on the Reed covered bridge on State Route 38 and painted it with 100 gallons of white paint.

Also to help beautify the area we built three wooden picnic tables. There was three-quarters of an acre around the bridge that the FFA cleared so the community could have a park to relax and have peace and quiet.

All of the members and advisors helped in the work totalling about 1,500 hours. The project brought good response from the community. *(Richard Ryan, Reporter)*

It took 100 gallons of white paint to repaint and spruce up the old bridge.

In response to the President's Challenge to FFA chapters for energy conservation we are anxious to share ideas from the chapters about successful projects or effective conservation ideas. They will be labeled with "Energy Action" titles so you can spot them in the "FFA in Action" section of upcoming issues. Send your ideas to: Energy Action, *The National FUTURE FARMER*, P.O. Box 15130, Alexandria, VA 22309.

ENERGY ACTION:

CLASS TAKES SHAPE

Seven members of the Scotland, South Dakota, senior vo-ag class have formed a corporation they call Solar Hot Air Production Experiment (SHAPE) so that they may learn all of the workings of a company from the ground up. Their company is building a solar heat panel and storage collector which will be used to help heat the ag classroom and shop area.

This solar heat panel is being built by the seven company members, under the direction of Advisor Robert Carman in the shop. The total cost of supplies for this project will be $200 and it is expected to be able to heat up the ag classroom by 4-7 degrees, thereby allowing the thermostat in the building to be lowered by this much.

The heat panel is made up of wood frame box, styrofoam, aluminum cans painted black, piping and rocks.

In forming SHAPE the class members were assigned the following positions —Mark Ochsner, manager; Fred Gall, project foreman; Jerry Stibral, designing engineer; Bob Pechous, advertising and promotion; Vernon Kreitzinger, sales manager; Roger Neth, legal counsel; and Jeff Nohava, accountant.

The main purpose of the senior agriculture class is to learn about the four types of businesses—corporations, cooperatives, sole proprietorships and partnerships; plus salesmanship, job interviews, budgets and other basic living techniques required in the adult world.

ENERGY ACTION:

GRANT'S INCENTIVES

The New Jersey FFA Association has received a $1,000 grant from the New Jersey Council for Food and Energy to help promote the President's Challenge among chapters.

This proposal takes the form of a cash award for the first, second and third place chapters; visual aids including the President's Challenge movie; energy conservation we are anxious to share ideas from all chapters about successful projects or energy conservation; and a tour of energy efficient agricultural operations.

ENERGY ACTION:

PAPER DEALINGS

A sharp increase in the demand for old newspapers for recycling nationally has been reported by the American Paper Institute, an industry trade association.

Recycling mills in every region of the country that rely on old newspapers as a raw material are encouraging residents of local communities to collect more old newspapers for recycling so that the demand created by new mill capacity can be filled.

API reports that inventories of old newspapers at recycling mills and at waste paper dealer plants have all but been depleted.

"To meet this new and increased demand, the paper recycling industry is launching a major public awareness program, urging individuals and groups to put their old newspapers to good use and earn extra money."

Chapters should consider this energy action activity. Those chapters interested in starting recycling programs can collect old newspapers and sell them to waste paper dealers listed in the yellow pages of the telephone directory. A step-by-step guide to establishing a recycling program is available by writing the American Paper Institute, Paper Recycling Committee, Department One, 260 Madison Avenue, New York, New York 10016.

Staff members at the National FFA Center bring in their newspapers for collection by the FFA Center Alumni affiliate for recycling as insulation.

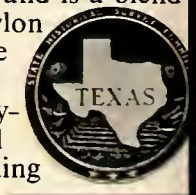
(Continued)

Champion knows how to dig. Just ask John Hileman or John Deere.

From digging in for a National Tractor Pulling Championship to just digging in, most folks prefer Champions. The spark plugs that can pull peak power out of virtually every engine. To keep your power perking, put in fresh Champions at least once a year.
CHAMPION
You can't buy a better plug.

PROUD TO BE AMERICAN

Satin is the thing for Spring from Panhandle Slim! Her stretch satin pant cove like a second skin and is a blend of 90% Antron nylon and 10% lycra. He and she are both wearing 100% polyester satin Trilobal print shirts for lasting comfort. Good looking western wear from Panhandle Slim is made in these United States.



Photographed at the Spanish Governor's Palace in San Antonio, Texa It has been designated a Registered National Historic Landmark by the U.S. Department of Interior.

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FFA IN ACTION

(Pick up the ACTION Stories)

A PROFICIENT BROTHERHOOD

Hard work and determination have paid off for Bruce and Richard Durrant, brothers and both members of the Kuna, Idaho, Chapter. They were both named FFA regional proficiency award winners in agricultural processing and agricultural mechanics, respectively.

The Durrants live on the Big "D" Ranch. It is a family owned corporation which involves 1,200 acres of farmland, where they raise hay, sweet corn, beans, peas, wheat, clover seed and potatoes. The corporation also owns a pea and bean warehouse, 160 head of dairy cows and 5,000 chickens. Living on such a large and busy farm has given the Durrants a chance to be involved in many aspects of farming since they were young children.

Richard, who was named national winner of the ag mechanics proficiency award sponsored by International Harvester, is the one in the family everyone else looks to if anything ever needs fixing in the Durrant household.

Nineteen-year-old Richard's main responsibility is to keep all the farm machinery in top-notch condition. This is not an easy task when you consider all the vehicles involved, but Richard, according to his dad, can always be counted on.

Richard has also been involved in constructing barns, free stalls, calf pens, corrals, storage buildings and fence.

Richard is never happier than when he is working on an engine or welding. He wants to become a mechanic in a parts house or equipment dealership. He has invested much of his earnings back into tools and equipment and hopes some day to have a repair shop of his own.

Richard served his senior year as chapter treasurer and is now serving a mission for the Church of Jesus Christ of Latter-Day Saints in the Oklahoma area.

Richard's 18-year-old brother, Bruce, was western region proficiency winner in agricultural processing, sponsored by Cargill. He has always been involved in working on the farm, irrigating, milking and driving machinery during planting and harvest, but his major interest has been in agribusiness and specifically agricultural processing. Bruce's interest in the field and his ability to watch and learn, have helped him to achieve the title of head bean mill operator and warehouse foreman of the Big "D" Ranch processing mill.

One of the areas of agricultural processing that Bruce has been involved in is egg processing. He has gathered, candled, packaged and transported eggs to be sold at local grocery stores. He has learned the importance and worth of a good product.

Bruce's favorite work that he does in agricultural processing, though, is the work he accomplishes as warehouse foreman of the Big "D" Ranch processing mill.

Being warehouse foreman gives Bruce some specific responsibilities including supervising employees of the mill.

Bruce has just finished a term as Kuna Chapter vice president.

(Continued on Page 40)

Bruce Durrant, left, helps his brother Richard with a tractor overhauling job.

Photo by Karen Greeley

THE PATZ SOLUTION: Rugged, Dependable Gutter Cleaners

Your gutter cleaner has to work day after day, year after year. Better make sure you can depend on it.

Patz gives you over 30 years of quality and dependability in every gutter cleaner we make. *We're the ones with the proven forged steel hook-and-eye link* . . . the secret to Patz performance. You can easily remove or replace links and flites without tools.

Your Patz gutter cleaner becomes a wise investment for you over the years because it's built to last. The all-steel slide and one-piece steel flites with wear shoes are engineered to withstand the rugged wear of everyday operation. And Patz gutter cleaners are adaptable to many layouts.

Talk to your Patz dealer. He'll show you how Patz performance means fewer problems for you. And that gives you more time to manage your livestock operation for greater profit.

Heavy-duty link (left) and extra heavy-duty link (right) for long chains and heavy loads.

No tools needed to remove or replace Patz hook-and-eye links.

Adapts to varied installation layouts.

Patz Pound, Wisconsin 54161 U.S.A.

Performance Strong as Steel GCD-1

FFA IN ACTION

(Pick up ACTION from Page 39)

STUDYING FOR SAFER HUNTING

The Marysville, Ohio, Chapter, in cooperation with the Cooperative Extension Service and the county game warden has trained over 600 local residents in safe gun operation and safe hunting techniques.

The majority of the people served by the program were high school age and represent the new generation of hunters taking to the field.

The FFA chapter spent four hours in each of the six high school physical education classes and contacted over 500 students. Skills such as proper hunter ethics, conservation of wildlife, gun care, gun handling, dressing of wild game, marksmanship and archery were covered by FFA-member-instructors. Those students who desired to be certified as safe hunters also spent two evenings, two-hours-per-night, completing the eight-hour safe hunters course which entitles them to purchase a hunting license in the state of Ohio. *(James Laird, Reporter)*

CAMP COURAGE

If you laid end to end the ears of corn collected from farms by Minnesota FFA members, the row would stretch from Minneapolis to the Great Wall of China.

For 26 years FFA'ers have been asking local farmers for donations of corn, selling it and giving the funds to Camp Courage and Courage North, camps for children and adults with physical disabilities. This year the cumulative total soared over the $1 million mark.

"I don't know of another school youth service project in the world that has endured for so long and given so much to one service organization," said Waino Kortesmaki, executive secretary of Minnesota's FFA for 30 years until his 1977 retirement. "The boys who gathered corn for Camp Courage years ago have grown up, married and some are seeing their sons and daughters working on the same project this fall," he said.

The project began in 1953 in the small farming community of Freeborn, population 300. The agriculture students walked into local farmers' fields to glean wasting corn downed by unusually high winds that fall. They sold it for $90.

The project caught the imagination of other chapters, growing to involve more than 9,000 Minnesota FFA'ers who collected over $135,000 last year for people with physical disabilities.

Two generations of Freeborn Chapter members have helped in collecting corn and selling it to raise money for Camp Courage. Alvin Stenzel, right, helped in the 1950s and his son Wayne, left, is this year's co-chairman.

FFA IN A DIFFERENT RING

For the past 33 years the Salem, Missouri, Chapter has held annual boxing matches as their major money-making project.

Each year we hold three weekly "sessions" of boxing. Each bout is made up of three two-minute rounds, that is if the boxer can successfully ward off his opponent's attack.

All of our bouts are expertly judged as well as refereed. This year our judging and refereeing were done by our high school coaching staff and one prominent FFA member who boxed in the first annual boxing matches.

All of our boxers are supplied with protective apparel. This includes headgear, mouthpieces and 12- or 16-ounce gloves. They must have a written permission to box. Also, each boxer can select two people to serve as managers and trainers. Each boxer must weigh within ten pounds of his opponent (except in the "battle royal," where the weight limit is 20 pounds).

The boxing matches are held in our senior high gymnasium. The ring, which we built over 20 years ago in our own shop, is taken down and put up by FFA members every night the boxing matches are held. As well, FFA members also work at the concession stand, popcorn machine, wrapping the boxers' hands, turning on and off the lights between each bout, handing out pamphlets which list the boxers for that particular night, work the door, as bellringers and announcers.

Our boxing matches are held on three consecutive Tuesday nights. It gives us more time to publicize the event. We do this by using the local newspaper and radio and distributing pamphlets listing the boxers for the night. These pamphlets are distributed by FFA members to local businesses as well as posted for the general public to see.

TANKERS TEACH AG

Members of the Army National Guard taught diesel mechanics to Zillah, Washington, members during their ag classes. Instructor Sgt. 1st Class Herb Horn, left, is instructing Joe Nutt, Anthony Rhorbach, Ron Wolf and Tim Braniff, who is looking down from the driving compartment of an armored personnel carrier.

ANTIQUES IN THE AUDITORIUM

The Union County Historical Society asked the Fairbanks, Ohio, FFA to refinish and rebuild 100 antique hand tools.

When the tools were all fixed and refinished, an antique day was held in the auditorium to display the tools and demonstrate the uses of some of them. The event attracted 450. *(Richard Ryan, Reporter)*

ACTION LINES

- Volunteer to go get the sophomore or junior who can't drive yet.
- Make a Christmas ornament out of rusty nails.
- Visit a seed house.
- Go talk with someone in jail.
- Read the FFA CREED slowly for its real meaning for you.
- Improve your reading speed.
- Tell the Food For America story with puppets.
- Take your nieces and nephews out to relieve your big brother or sister.
- Make a ping-pong court in the empty barn.
- Do without a bag of munchies.
- Start a collection of something that's just "you"—like owls.
- Speak up loud in the discussion.
- Paint a picture on an old barn shingle.
- How about a cucumber and cream cheese sandwich?
- Just go ahead and tell 'em you did it.
- Take care of it now.
- Decorate your room with last year's FFA calendar pictures.

LAYING THE GROUND

Santa Fe, New Mexico, school system has had a tremendous need for outdoor recreation fields.

This year the assistant superintendent of schools, Amos Melendez, and a past State Farmer, approached the Santa Fe FFA Chapter concerning the construction of a baseball-all purpose field located on the Santa Fe High School campus. Advisor Chavez helped prepare specific plans for the field which then went to the board for approval. Bids were taken for the needed materials and by the end of May, the decision was made. The FFA was to start construction in late July.

The budget for the project was $30,000. With this, the FFA was to purchase 100,000 square feet of sod from a turf ranch in Morarity. In addition, specialized tools needed to be purchased along with a disk for the school tractor, fertilizers and 800 feet of chain link fence, an automatic sprinkler system and a gas-powered auger for the FFA. Labor was budgeted at $6,000 and 11 FFA members were paid a rate of $4.50 per hour.

On July 24, actual construction began. The field was surveyed for boundary and fence lines. Then it was graded and disked with the school tractor, raked and prepared for the sod. The sprinkler heads were installed with the assistance of an irrigation specialist.

The crew was divided into two working units, one laying sod and the other preparing the soil for the next day and applying a 16-20-0 fertilizer. Each day the crew laid 9,000 square feet of sod, one "semi-truck" load. The sod was laid down in approximately three weeks. The next step was the construction of a chain link fence around the field and in front of the dugouts.

The school district and community received the project enthusiastically and is looking into securing additional funds from the Bureau of Outdoor Recreation.

As well as providing a community service and jobs, the FFA members had an opportunity to learn many new things, such as operating a tractor and forklift, working a gas-powered auger, constructing a chain link fence, surveying and operating an automatic sprinkler system. *(Heather Gladfelter, Reporter)*

Advisor Chavez, left, and supervisor for the project, helped members lay the first roll of sod in the field.

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Steve's FFA advisor, Mark Buell, pays frequent visits to the Althouse farm to offer advice on Steve's crops projects.

By learning to operate heavy crops machinery at an early age, Steve has developed skills in a variety of field chores and machinery maintenance.

All in A Day's Work

By Jeffrey Tennant

WAVERLY, Nebraska, FFA is one of those chapters. You know, the type that thrives on a good showing and an all-out attempt to excel. They don't always place first but they never lose.

They're too busy to be called losers. Waverly FFA has never lacked leadership—reason enough for their proud tradition. Guided by advisors such as the current teacher, Mark Buell, the chapter has produced not only plaques and trophies but well-rounded young farmers as well. Of one of these students, Advisor Buell says, "I know I sound like a typical ag instructor, bragging on my own students, but this guy is one in a million."

Steve Althouse wouldn't agree with his advisor. For Steve, accomplishments are all in a day's work. And a long day at that.

"I can remember him running a combine at age 10," says Steve's mother, Marlene. "He'd work all hours during harvest right along beside the rest of us. Did a good job, too." Steve acknowledges with a nod, recalling that he worked without much "ordering" from mom and dad.

In 1972, the Althouse family purchased their farm, a productive spread of

2,400 acres set in milo, corn, wheat, soybeans and alfalfa. Steve now rents 160 acres from his father, Arthur, but Steve's freshman program in FFA four years ago didn't include crops production.

"My first year," recalls Steve, "I bought some feeder pigs with wages I'd earned from crop farming and working on my uncle's turkey farm. I've still got the pigs but I'm more involved in the crops now."

Farming turkeys, crops and pigs has introduced Steve to a variety of production proficiencies. Everyday chores might include testing soil one hour and artificially inseminating turkey hens the next.

One of those "one in a million" FFA members, Steve Althouse is plowing through college on his way to a farming career.

"Last year, as a senior, Steve would get up at 5 a.m. three days a week to help inseminate turkeys," says Mark. "The family also finishes out 800 feeder pigs per year. But Steve's project emphasis has been on crops, not livestock."

"When I decided to expand to cropping," says Steve of his farming project, "I went into a 60/40 partnership with Dad on part of the fields. Besides the work, I'd help with farm decisions and pay my share of machinery and fuel costs. By my senior year, I was farming 17 acres of wheat, 46 acres of milo and caring for 175 pigs. I've just enrolled at the University of Nebraska but I'm going to farm 160 rented acres and tend pigs. My studies in farm mechanics at the university should be applicable here on the farm."

Farming and college mean more long days for Steve. The university, in nearby Lincoln, will be demanding of his time. But as Mark puts it, "If anyone can do both, Steve can. Four years of college is a good investment, especially with agriculture becoming so management intensive. You don't remember all you're told in college but you learn where to go for information and how to obtain answers to farming problems."

Salutatorian for a graduating class of 123, Steve's ability to keep records is unquestionable. But being able to come up with correct figures doesn't necessarily benefit the productive farmer. Figures must be applied to management decisions.

Steve says he's "always tried to keep tight records" but agrees with his advisor's conclusions that close records can be detrimental.

"Unless records are applied properly," says Mark, "tight record keeping can be wasteful because of the time it requires."

"On the pigs," adds Steve, "I can tell from records if a new production practice is working. If it is, I set goals for myself based on the results. I keep records on average daily gain, pounds fed per 100 pounds gained and cost per unit produced. If any of these records show improvement, I'll set a goal accordingly and shoot for it, trying to improve on previous marks."

Steve admits taking several gambles in his management efforts. One decisive move came during a worrisome time for southeastern Nebraska farmers.

"This is dryland country," he says, gesturing toward the level horizon of corn stalks and overhead sprinklers. "Dryland farmers usually won't grow corn; they stick with milo or other grain. However, during a couple of dry years, we needed something to get the crops growing.

"We came across a study concerning underground water locations. Based on the studies and our desire for irrigation, we dug a well. Fortunately, the well has access to a flow of about 800 gallons per minute. With that much water, we went with two center pivot irrigation systems that traverse a quarter-mile radius of cropland. We figured we could pay for the machines with an increase of 60-70 bushels per acre."

The Althouse's pivot systems were among the first in an area that uses the giant moving pipelines extensively. Each of the self-propelled systems covers 160 acres in four days, arching streams of fresh water from high-pressure sprinklers. The long pipelines, set several feet above the corn's tassels, revolve around a central pivot. From the air, the systems' water-fed fields create huge green circles on an otherwise brown plain.

Steve says, "The irrigation machinery is paying for itself by increasing yields and serving as an applicator for doses of liquid nitrogen fertilizer."

With high production (the family hauled 40,000 bushels of grain in one day last year) comes important, make-or-break decisions. Do you sell immediately on the cash grain market? Do you store your harvest indefinitely?

"Because of the financial incentive offered by the government," Steve shares, "we built a combination grain storage and machine shed to take advantage of the farmer-owned reserve program. We sealed grain for a year then sold it when the release target price was reached. We paid back the government loan granted us for keeping the grain off the market and made enough money to pay for the shed."

With an additional 17,000 bushel capacity in eight round bins, Althouse grain finds a home after harvest. Steve, his father and uncle designed and built every building, including the hog confinement barn. Farm mechanics also comes Steve's way in the slack seasons of winter and early spring. The family spends much of their off-season time assembling farm machinery for a local dealer.

"Our neighbors think we buy new equipment every year," Steve quips.

Steve's record in vo-ag/FFA reflects a determination to achieve. In addition to awards and honors such as chapter president, star chapter farmer, star area state farmer and state officer, Steve has led teams to state wins in ag mechanics and land judging. He was named high individual in both contests and second place individual in a state crops contest. The Nebraskan's knack for business organization showed in his office of president on two state champion parliamentary procedure teams.

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Photo courtesy of Wichita Falls Times Publishing Co.

A big black cloud came out of the sky, attacked Wichita Falls and left this farewell.

When a Tornado Strikes

The day of April 10, 1979, for the residents of Wichita Falls, Texas, started no different than any other day. But that evening will not soon be forgotten by many of the people.

School was out for the week and that meant there would be a lot of things going on with my buddies. I had had a job interview that morning and was a little worried about how it would turn out.

To relax after the interview, some friends and I decided to go to a movie. One, Rene, would have liked to have gone but had to work later that afternoon. She was thinking of calling in sick so she could go, but went on to work, not wanting to risk losing her job.

When we got home we heard the tornado warnings on the television. I had never been scared of these warnings before, for growing up in this part of Texas they were pretty common for that time of the year. But I felt as if this time it wasn't just another warning.

By 5:45 p.m. I had begun to open windows and had run outside to look and see if I could find anything that might look like a funnel cloud. There were always tornadoes around Wichita Falls. And even though people were very used to the warnings and sightings of them, they would go out looking for a funnel so they would know they needed to get to some kind of shelter—which was usually a hallway, bathtub, or for some, storm cellars. My family, for one, had a cellar and the neighboring family came over and asked if they could share it if a tornado were to hit.

Not really knowing what would become of the evening we proceeded to put pillows and flashlights in the cellar. At approximately 6:00 p.m. the television stations went off the air, we headed for the backyard, grabbing our dog and hurrying into the old cracked storm cellar. We sat only seconds before the wind was screaming through the tiny window in the top of the cellar, level with the ground. The minutes seemed like hours while the monstrous black cloud swept across the southwestern portion of the city and on through the mid-section of Wichita Falls, taking everything in its path. My youngest brother and I watched as the tree outside the window exploded and flew inside. The door blew off and I'd never seen or known such fear.

Minutes later it was gone. I didn't want to look outside that hole in the ground that had saved our lives. As we climbed the steps, tears came to my eyes and a rush of fright struck. The house, the neighborhood and what seemed like the whole town was nothing but rubble.

I expected to hear people screaming for one another and dashing around madly like it might appear in a movie. But everyone was calm.

Morning came and with that following day more heartaches. The traffic was unbelievable. People were trying to make it back to their homes to get an early start on cleaning up. It was a most exhausting day, but more than I expected was found.

That night, the reading of the death list was the hardest part of the whole experience. Rene's name was read. Marienna Rene Graves was a Greenhand member of our FFA chapter and a friend since elementary school.

Friday, the 13th, most of the funerals were held, including Rene's. Nothing else is harder than to attend a funeral of a school friend. Many of the FFA and rodeo club members were present in the small town service.

But life has to go on, most people think, and some here now wish for them it didn't. I myself only want to thank God I'm here and wish no one would ever have to go through the pain and agonizing hours of a disaster as our town did. The rebuilding of lives, homes and businesses still continues and as our new motto goes—"Wichita Falls is coming back, strong and fast." *(Sharon Aldrette, Wichita Falls FFA member)*

Corn Gold

(Continued from Page 15)

"We constantly face the challenge of selling," Scott breaks in, "showing a farmer your product is better than what he's now using. The highlight of my work here has to be making my first sale and setting up my first dealer."

Scott attributes much of his ability in customer relations to leadership activities in FFA. "Scott came through vo-ag with some outstanding students," says Jim Stevens, Scott's FFA advisor. "In his senior year at Unity High School, Scott had seven classmates. Out of these eight came a section star farmer, section star agribusinessmen and four section proficiency award winners. They all seemed to motivate one another."

"Scott will help our company expand," says Larry, looking to his son's future. He works well with people, whether it's finding the right variety for a grower or setting up a dealer. He wants to work in all three phases of the business—production, research and sales. Equally important as ability, Scott shares our company goal of higher production without a sacrifice of quality."

Scott realizes the importance of his family's product, a main ingredient in the bounty of the nation's meat and dairy cases. He also knows that triumph brings challenge in the world of food production. A concern for farmers, an ambition to grow and a will to work—traits that color "corn gold" futures for Scott and Lewis Seeds.

Outlook

(Continued from Page 18)

meat products, along with eggs, will continue to face decreasing prices. The significant price depressing factor, with the exception of lamb, is increased supplies worldwide and a stable demand. Lamb production is down but slaughter levels for 1980 will increase. Production costs are on the rise across the board which further squeezes profits. A large supply of pork, meaning lower prices, is also forcing down poultry meat prices.

Feed grain. Demand for U.S. feed grains—corn, sorghum, barley, oats and rye—should total more than 1979's record harvest. Boosted farm prices for corn are expected to average $2.35 to $2.65 per bushel compared with $2.20 in the 1978-79 marketing year. U.S. feed grain exports will rise about 18 percent this year, chiefly a result of a large Soviet import demand.

Dairy. Production for 1980 is coming on strong but demand appears to be taking a weaker tone. The bleak outlook for the general economy in early 1980 suggests some weakening in dairy products demand. However, farm milk prices in 1979 averaged 14 percent higher than the year previous. In early '80, milk prices will ease but gain during the second half of the year to 10 percent above 1979 prices.

Fruit and tree nuts. The 1979-80 season holds promise of plentiful fruit and tree nut supplies for consumers. However, the good supply also signals moderately lower prices for producers. A record large citrus crop, a near record apple crop and increased supplies of most other noncitrus crops will result in lower grower prices. Good demand in both fresh and processing markets should hold up grower returns and will result in a profitable year for the fruit and tree nut industries.

"Hi, Mr. Morehead! Is your daughter home?"

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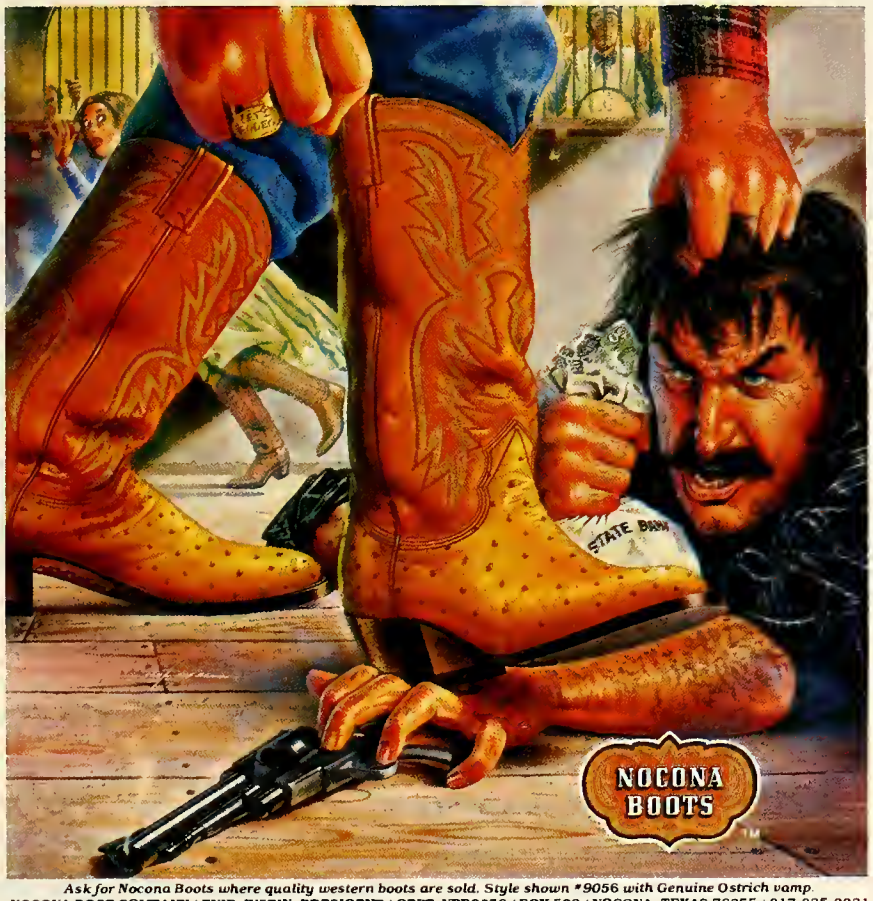

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In this crosscut view of a proposed space colony, the agricultural area may be seen as different levels of farming activity. The farming area would encircle a colony.

Farming the Universe

Astrofood and astrofeed may be the resultant products of man's crossing the threshold of outer space agriculture.

YOU have heard of astroturf, astrodome and astronaut, but have you heard of an astrobean? Scientists are experimenting with soybeans—astrobeans—as possible food and feed in outer space colonies. Soybeans are one of several items being tested for future production in outer space agricultural areas.

Scientists at several universities, working in conjunction with the National Aeronautics and Space Administration (NASA), are seeking ways to produce food in outer space. They must first find out which plants and animals can survive in an outer space environment.

In focusing on outer space agriculture, the question comes to mind: where will

To a space traveler, an outer space colony might look like this—a giant, man-made world.

the soil for the farms be obtained? Because the soil for farming would be costly to transport from Earth, other sources of soil must be found. One possible source could be the moon since it will be closer to the proposed space colonies than Earth.

Following the Apollo flights to the moon, NASA tested the lunar soil samples brought back to Earth by the astronauts. Tests showed that the soil is similar in content to that of volcanic ash. Lettuce seeds grew to maturity in the lunar soil; the lettuce definitely utilized materials in the soil. With some preparation, moon soil could be used for farming.

Thinking in terms of colonizing the moon itself, Russian scientists simulated long lunar nights. They tested various plants for adaptability to the long lunar darkness. Cultures of vegetables—beets, turnips, carrots, dill, white radishes and wheat—were grown in an enclosed environment with light and darkness controlled.

The Russian scientists reported that the plants did well. They predict grain from the wheat could furnish seed for future cultivation on the moon. The moon could be used, as the Russians suggest, for space farms, or its soil could be transported to agricultural areas of space colonies.

Minor planets, called "asteroids," orbit near Earth and could also become agricultural areas. Recent discoveries reveal that some asteroids contain large amounts of nitrogen, hydrogen and carbon. These are all necessary life-building elements not found on the moon. But recent experiments may erase the need for asteroid farmland.

An alternative method to the use of soil for farming is being tested. Called "hydroponic" farming, plants grow in a system in which no soil is needed. Instead, plants grow in water containing all necessary minerals. Hydroponic farming may help to solve the problem of transporting soil over long distances, but it raises another question: where can water be obtained in outer space?

Present plans for space colonies propose recycling of water, including human and animal waste materials. Some of the waste could be used as plant nutrients. Water could also be brought from asteroids.

Yet another problem looms for space farmers: how does weightlessness, or zero-gravity, affect plants and animals? The obvious way to test effects of zero-gravity would be to conduct experiments aboard spacecraft in space.

In 1975, American astronauts and Russian cosmonauts teamed up for the Apollo/Soyuz flight. Killifish eggs and juvenile fish went into space with them. Scientists were anxious to know what effects weightlessness would have on unhatched fish and juvenile fish. After 14 days in space, the fish were tested upon return to Earth. No adverse effects were found; the fish and hatchlings adapted well to being in space.

Later, Russian cosmonauts carried fish aboard a Salyut flight. They also had onion seedlings in an enclosed liquid (hydroponic) environment. Both fish and onions adapted easily to zero-gravity.

Going one step further, Russia plans to send Japanese quail eggs into space. The eggs will be incubated in zero-gravity conditions aboard a spacecraft. The spacecraft should return to Earth before the eggs hatch. Russian scientists hope to use adult Japanese quail in a later flight experiment.

American scientists are preparing several organisms to send on U.S. space shuttle flights. They plan to test items such as pine seedlings and oats to discover the effect of zero-gravity on plant growth, shape and nutrient uptake.

What does the future hold for agriculture in space? Farms will have large and predictable yields, be free of poor climate, variable weather, and undesirable crop pests. Rain and sunshine will be controlled. Unlimited space will be available for farming as agricultural areas can be stacked in layers in the outside rim of the space colony. The moon and nearby asteroids could serve as agricultural areas also.

Farmers of the future may actually reach for the moon and the stars in order to produce astrofood and astrofeed for outer space colonies. *(By Claire Crouch)*

"For 20 years I tried to farm this land, then one day I got an idea."

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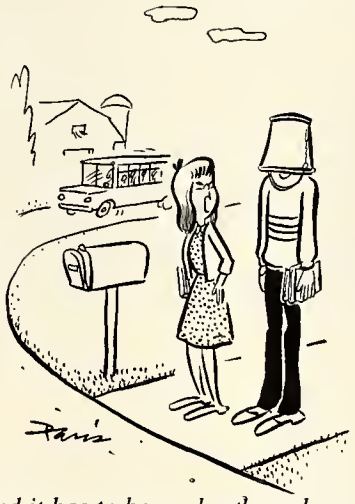
The hired man on a farm went on his first trip to the city. He returned wearing a stick pin with at least four carats bulk radiance. The jewelry dazzled the village belles, and excited the envy of the other men. His employer bluntly asked if it was a real diamond.

"Well, if it ain't," said the hired man, *"I've been skunked out of four bits."*

Bobbie Mae Cooley
Bowen, Illinois



"And it has to be my brother who won't let anybody see his new mustache 'til he's finished growing it."

High schooler to clothing salesman: *"If my parents like it, can I return it?"*

Celia Cheek
Scottsville, Kentucky

Since 1955, "Charlie the Greenhand" cartoons have appeared on this page. They were all drawn by Stan Stamaty, a well known artist who lived in New Jersey. But shortly after the last issue went to press, we learned that Mr. Stamaty died of a heart attack in September while working on a "Charlie the Greenhand" cartoon for this issue. Mr. Stamaty also did the illustration for the "Chapter Scoop." In honor of his long service, we have selected some of the favorites from over the years to rerun. The cartoon at right was one of Mr. Stamaty's earliest contributions.

Usher: *"How far down would you like to sit?"*

Little old lady: *"All the way, please, I'm very tired."*

Thomas LaMance
Modesto, California

"What a welcome," grumbled the father visiting his son at college. *"I'm barely off the plane and you ask me for money."*

"But, Dad," the son protested, *"can I help it if the plane was 30 minutes late?"*

Thomas LaMance
Modesto, California

Woman to neighbor, as her husband leaves on hunting trip: *"George hasn't the heart to shoot anything. He just goes so he won't have to shave for a week."*

Jerry Fogle
Woodsboro, Maryland

And then there was the political candidate who hired two research assistants—one to dig up the facts and the other to bury them.

Jerry Fogle
Woodsboro, Maryland

Dimm: *"If your head feels squeezed, your eyes almost pressed shut, you smell an unusual odor, and one foot is cold, what do you have?"*

Witt: *"You probably have your sock pulled over your head!"*

Steve Claburn
Corinth, Mississippi

"I beg your pardon," the man said to the Indian, *"what's your son's name?"*

"Ninety Eight Cents, he no buck yet."

Bruce Van Sart
Pella, Iowa

John: *"You know that girl Jaws ate? Did she have dandruff?"*

Don: *"How should I know?"*

John: *"Well, they found her Head-N-Shoulders on the beach."*

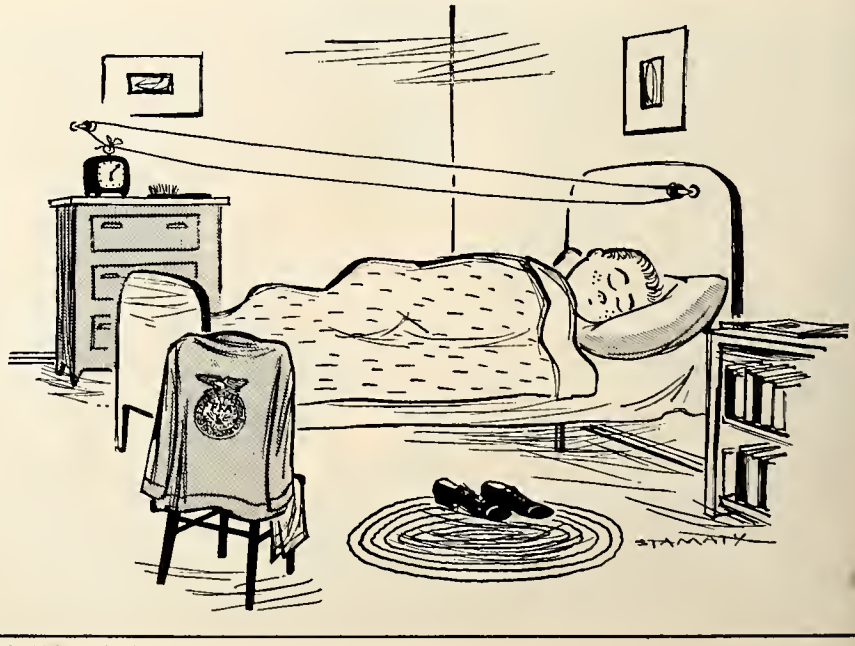
James Green
Apollo Beach, Florida

Lady: *"I snore so loudly at night, Doctor, that I wake myself up."*

Doctor: *"I suggest you sleep in another room."*

Monique Livingston
Lancaster, California

Charlie, THE GREEN HAND



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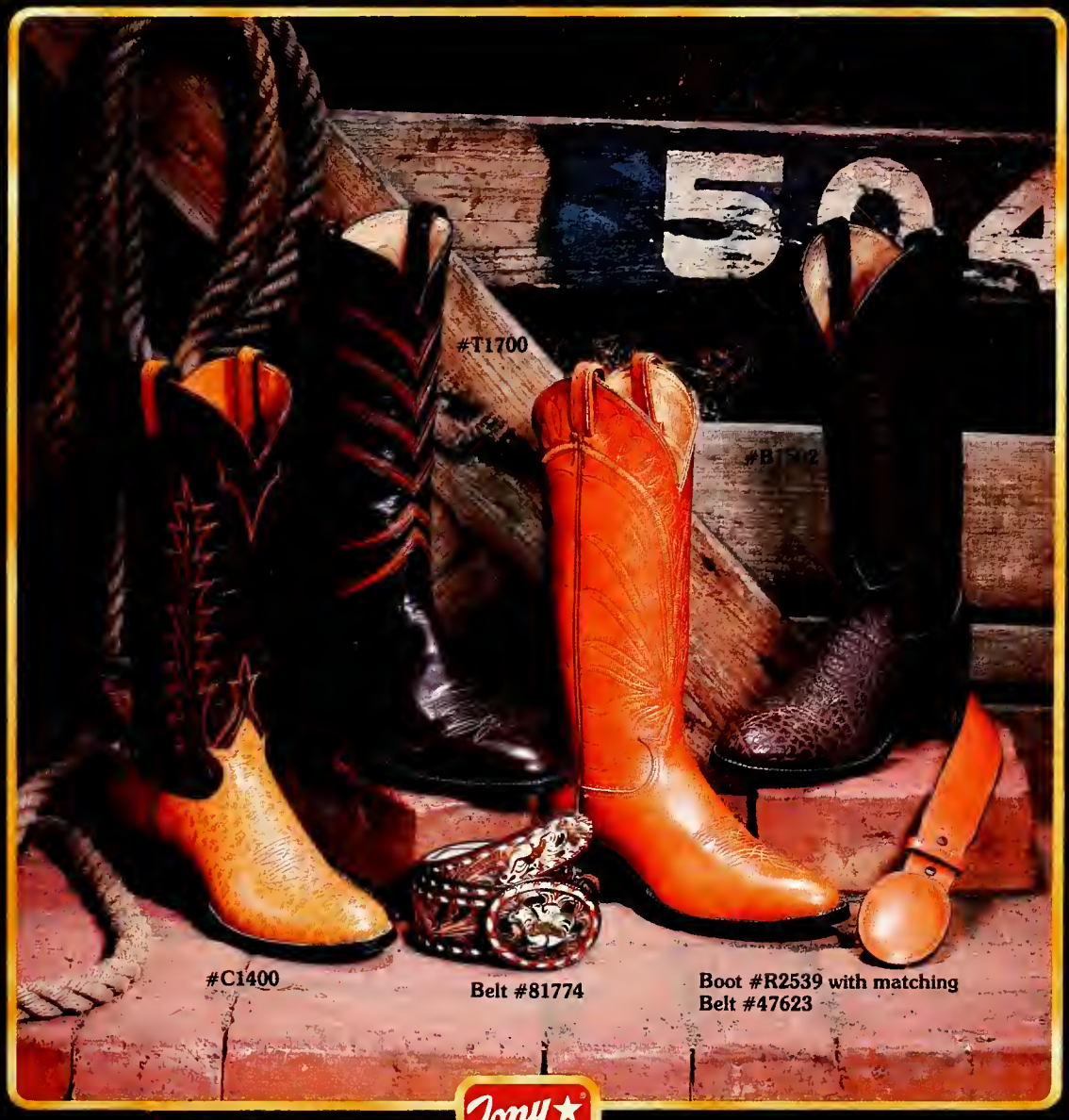

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Recipe: Cut rabbits into serving size pieces; soak young rabbits 1 to 2 hrs. in salt water — 12 to 18 hrs. for older rabbits — 1 tsp. salt per qt. of water; after soaking, wrap meat in damp cloth and store overnight in cold place; butter a casserole dish and add a layer of rabbit pieces; sprinkle with ½ tsp. salt, fresh ground pepper to taste, ½ tsp. ground thyme and 3 large bay leaves; add 5 slices cut bacon; repeat layering until ingredients are used up; pour 1 cup water over casserole, cover and bake at 350° until tender — 1 to 2 hrs. depending on age; remove cover and sprinkle 1 cup seasoned bread crumbs over casserole; bake 30 min. and serve.

THERE'S ONLY ONE WAY TO MAKE SHENANDOAH VALLEY RABBIT CASSEROLE.

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